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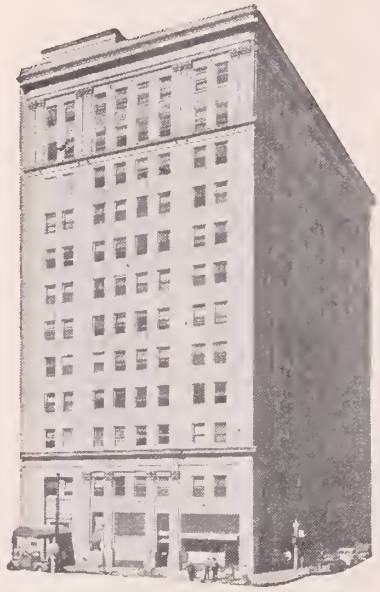
The Journal

OF THE OKLAHOMA STATE MEDICAL ASSOCIATION

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THE JOURNAL
of the
OKLAHOMA STATE MEDICAL ASSOCIATION

EDITORIALS

INFECTIOUS MONONUCLEOSIS

Though not a new disease infectious mononucleosis has been reported under so many different names since Pieffer first described it under the term "Drusenfieber" in 1889 there is room for some confusion about the condition especially in the minds of general practitioners. The prominence which the condition has assumed, because of more careful diagnostic scrutiny and possibly because of increased prevalence makes it obligatory for the family medical advisor to be informed and ready to make the diagnosis and to meet the lay inquiries about the disease which of late has been diagnosed and freely discussed among relatives and friends and occasionally handed on with the cocktail and not infrequently at formal dinners where doctors may gather.

Such favored physicians if well informed may promptly enlighten all who are intrigued by the tempting lure of medical gossip, if they quote Musser's definition of the disease, "an acute contagious disease of the reticulo-endothelial system characterized by glandular enlargement, fever, hepatomegaly, splenomegaly, increase of the mononuclear cells and symptoms of constitutional debilitation".

Seriously speaking, a working and talking knowledge of the condition is of increasing importance to the people and the medical profession.

While in the brief space allotted editorials, it is impossible to convey an adequate impression of the varied clinical manifestations of this relatively benign condition with its multiple complications and its widespread and varied pathological manifestations, it seems pertinent to urge all physicians not already armed with the main diagnostic, pathologic, therapeutic and prognostic facts to look up the latest authorities, replenish the stockpile and be ready to "pass the ammunition".

PHYSICIAN HEAL THYSELF

Physicians who advise periodic health examinations should practice what they preach. Statistical studies show that the annual death rate of physicians is considerably higher than that of the general population. This alone should cause physicians to become interested in their own health.

As far as can be determined through available sources of information in Oklahoma there has been no concerted effort to determine why physicians have a higher mortality rate than other people. Neither has there been any obvious plan for uniform check up to determine the individual physician's state of health and to chart his future according to his physical competency, or, in other words, instituting stop gaps and safeguards with a view of preventing illness and prolonging life. While advocating the production of more doctors would it not be wise to institute plans for the prolongation of life among those already in practice.

Is not this a problem for consideration by the council of the State Medical Association? Perhaps the State Association could devise ways and means to provide diagnostic studies and advice similar to that often made available to employes in industry and to individual patients by their physicians. In other words, a service for physicians the equal of that advised for their patients and friends.

LOOKING BACK
THE PUBLIC HEALTH SERVICE AND ENVIRONMENTAL HEALTH

The Public Health Service has announced a book on "Environment and Health"[1]—the first to deal comprehensively with this theme.

"Airs, Waters and Places" was perhaps Hippocrates' greatest work. It is interesting to note that 2400 years before Public Health Service gets around to the task of making available its first publication on environment and health, Hippocrates wrote with great intelligence for his time, on the locality, the season, the water, the atmosphere and the winds. He discussed environment and its effects in great detail, citing the people of different races and widely separated localities as examples. It is astonishing how much he knew and how many of his concepts naturally slip into modern medical thinking.

1. Available at the Government Printing Office, Washington, D. C., at 75 cents per copy.

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A WARNING

Unfavorable effects of cortisone and ACTH in cases suffering from tuberculosis in the literature and the reports of the Veterans Administration conference on chemotherapy in tuberculosis, there is cumulative evidence, both clinical and experimental (in the laboratory) that the administration of cortisone and ACTH tends to re-activate latent tuberculosis and to cause exacerbations of active tuberculosis regardless of the stage of the disease or the degree of activity. This danger should be kept in mind and patients should have a thorough examination to determine the presence or absence of tuberculosis anywhere in the body before these therapeutic agents are employed. Patients receiving cortisone or ACTH should be carefully watched for symptoms and signs developing in lesions not discovered by previous examinations.

HOW GREAT, HOW VULNERABLE, HOW SMALL, HOW SELFISH ARE THE GREAT

In the last quarter of the 19th Century Frederick III, married to the daughter of Queen Victoria of England, father of Kaiser Wilhelm II of Germany, developed a hoarseness after an attack of measles. Being unable to shake off the persistent hoarseness and an annoying cough, Professor Gerhardt, the laryngologist examined his throat and discovered an excresence on the left vocal cord. An unsuccessful attempt to remove the new growth was followed by a series of cauterizations. The growth apparently disappeared and the treatment was considered satisfactory. A few weeks later the growth recurred and was found to be larger than before cauterization. Cancer of the larynx was suspected and Professor Von Bergmann of Berlin was called in consultation. It was agreed that the growth was malignant and removal of the larynx advised. Because of the royal position of the patient and the risk involved, the famous English laryngologist Morell Mackenzie was consulted. After examination he refused to concur without a biopsy. Rudolph Virchow, the father of cellular pathology, examined the fragments of tissue and reported no evidence of malignancy. The attending physicians were discredited and Mackenzie took charge of the case. Because of the favorable diagnosis, Mackenzie was idealized, knighted and decorated with the Grand Cross of the Hohenzollern Order.

Two or three months later Mackenzie found that the growth had taken an unfavorable turn with a "distinctly malignant look". All the physicians formerly connected with the case were called and it was agreed that the larynx should be removed but operation was declined. Breathing became more difficult and finally life was prolonged by tracheotomy. On June 15, 1888, approximately two years and three months after his German physician had diagnosed his case and only three months after he ascended the throne, the Emperor Frederick III died of bronchi-pulmonary infection associated with cancer of the larynx.

Since Frederick III apparently was more conservative and less ambitious than his son, the late Kaiser, one wonders what might have been the course of history if laryngectomy had been performed when first advised and he had lived to rule Germany through the first two decades of the 20th Century.

It is interesting to note that Virchow disclaimed responsibility because he could not be held responsible if the specimen did not contain the cancer cells and Mackenzie claimed the growth had taken on malignant characteristics after his first examination.

Though the element of error in such procedures has been greatly reduced, such mistakes are still possible. In this connection it should be observed that experience in social and professional relations suggest that favorable progress in human nature is lagging far behind that exhibited in the field of science.

THE SO-CALLED SAFETY BELT

In a Paris to London flight of British European Airways a Viking plane crashed at the London airport October 31, 1950. Twenty-eight of the 30 occupants were killed.

In the *British Medical Journal* Donald Teare, M.D.[1] has reported on the post-mortem examinations of the 28 victims. Since this is relatively a new field for the pathologist and of great interest to all physicians, the causes of death are reproduced as listed: fractured skull, 10; fractured cervical spine, 1; traumatic subarachnoid hemorrhage, 1; ruptured aorta, 8; ruptured lungs, 3; ruptured heart, 3; and ruptured liver and spleen, 2.

The author says, "it would appear that had no fire occurred the fate of the occupants would have been the same."

The author saw only three other cases of rupture of the aorta in 2,500 autopsies, one in the radio operator of the Dakota which crashed at Mill Hill and two due to traffic accidents. This intriguing subject is well

defined in these paragraphs lifted from Doctor Teare's discussion:

"The ruptures of the aorta were associated with fractures of the ribs, disruption of the intercostal muscles, fractures of the spine, or laceration and bruising of the surface of the liver. These injuries were, in my opinion, caused by acute flexion of the body over the safety-belt. A similar mechanism could well have accounted for the findings in the eight who died from laceration of the heart, lungs, or liver and spleen. It would also appear that had these travellers been seated with their backs 'to the engine' and supported by cushioned upholstery these particular types of injury might have been avoided.

"It is clearly of little consolation to escape a sudden death only to die in a conflagation, but not all crashed aircraft catch fire, and presumably with advances in foam-protected petrol tanks the danger of fire will diminish."

Until our seats are reversed and supplied with heavy upholstering, a *Women's Home Companion*, a *Saturday Evening Post* or better, a copy of *Fortune* between the passenger's abdomen and his so-called safety belt may break the shock and offer the passenger a chance to escape the fire.

What can be said of speed, that surpasses man's physiological limitations and poses so many difficult problems in equally as many scientific realms yet inadequately explored? It appears that the engineer has thrown us out of gear.

1. Post-Mortem Examinations on Air-Crash Victims, Donald Teare, M.D., M.R.C.P., *Brit. Med. Assn. J.* No. 4733: 707-8 (September 22) 1951.

FOR THE NEW YEAR

I recommend the philosophy of life expressed by Sir William Osler in his three ideals:

"I have three personal ideals. One is to do the day's work well and not bother about tomorrow. The second ideal is to act the Golden Rule, as far as in me lay, towards my professional brethren and towards the patients committed to my care. The third has been to cultivate such a measure of equanimity as would enable me to hear success with humility, the affection of my friends without pride, and be ready when the day of sorrow and grief came to meet it with the courage befitting a man."

MEDUCATION

By accident, Dr. R. C. Baker, editor of one of the best county medical society bulletins in the state coined the following significant word. Doctor Baker wrote an editorial about the recommitment of Senate Bill 337 to the Senate Labor and Public Welfare Committee. He sent the editorial to press supposedly under the following title, "Federal Aid to Medical Education Bill Gets Set-Back." When the Bulletin came out he was surprised to find the following title, "Federal Aid to Meducation Bill Gets Set-Back." The word, never heard of before, has been filed by the publishers of Webster's New International Dictionary and will be included in the next edition if its usage warrants. In these days of increasing demands, a short cut to medical education is greatly to be desired. At any rate the Journal congratulates Doctor Baker, the versatile editor of the *Bulletin* of the Garfield-Kingfisher County Medical Society.

In the magnificent book entitled *On the Physician* there are various observations which on account of their freshness, vitality, and correctness deserve to be read and considered even today. "For the physician it is unquestionably an important point to have a fine appearance and to be well nourished, because the public believes that those who do not know how to take care of their own bodies are not in a position to think about the care of others. He should know how to be silent at the proper moment and should conduct a regular life, because this contributes much to his good reputation. His behaviour should be that of an honest man and as such he should appear gentle and tolerant before honest men. He should not act impulsively nor precipitately; he should maintain a calm and serene visage and should never be in a bad humour, but on the other hand should not appear too gay."—*History of Medicine* (by Castiglioni) page 157.

TOO LATE HE DISCOVERED THIS

"You cannot trust the battle of freedom to socialism. Socialism has no interest in liberty. Socialism is the negation of liberty. Socialism means the community in bonds. If you establish a Socialist community it means the most comprehensive, universal and pervasive tyranny that this country has ever seen. It is like the sand of the desert. It gets into your food, your clothes, your machinery, the very air you breathe. They are all gritty and regulations , orders, decrees, rules. That is what socialism means."—*Lloyd George.*

SCIENTIFIC ARTICLES

PENETRATING ABDOMINAL INJURIES*

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INTRODUCTION

Penetrating abdominal injuries during the civil war were associated with the appalling mortality of 90 per cent. Despite the remarkable development of abdominal surgery and adjuvant therapy, the mortality during the last world war was approximately 40 per cent. The quickening pace of mass destruction has voided many of the benefits of modern surgical knowledge. The victim of the modern bomb not only becomes the recipient of the intrinsic component parts of the shell, but is subject to fragmentation of anything that is in the path of the explosion.

To a lesser degree the management of penetrating injuries in the civilian population constitutes an ever increasing problem. It is the intent of the author to discuss some of these factors which contribute to a more successful management.

INDICATIONS FOR SURGERY

With certain exceptions, penetrating wounds of the abdomen should be explored as soon as the condition of the patient permits. Needless to say, a patient who is morabund and dying will receive no serious consideration for surgical intervention. The exceptions to operative intervention that will receive further discussion are small stab wounds, shotgun wounds at a distance and a patient recovering from a penetrating wound of more than 36 hours duration. With temerity the surgeon may pursue a conservative management in small stab wounds of the liver, kidney or empty stomach. Granted the ideal circumstances of the injury of the listed organs by an object such as an ice pick, recovery may occur without exploration. However, with a full stomach, concomitant bowel damage, or spleen laceration, a mortality may be exexpected. Wangensteen has shown in experimental animals that if the stomach is empty, wounds up to 1 cm in length are tolerated without mortality, so that under certain circumstances recovery may be expected even following small stab wounds of this organ. In penetrating injuries of the upper stomach or esophageal gastric junction the surgeon must evaluate the danger of the injury as opposed to the hazard of thoraco abdominal approach.

Close range shotgun wounds are often hopeless. Patients who survive to be considered for surgery, frequently have irreparable soft tissue and visceral damage. Shotgun wounds fired at a distance producing multiple perforations of the abdominal wall incur comparable pathology of the viscera. It is not feasible nor proper to attempt by laparotomy to close hundreds of perforations. These perforations are so small that spontaneous closure occurs, if not traumatized by a surgical procedure. Surgical intervention will produce extrusion of feculent material with concomitent peritonitis. Adjuvant therapy is institute. The patient is observed for development of localized abcesses, secondary hemorrhage or frank perforation and treated for these complications. Willis, Myer, Counseller and others have contributed to this axiom.

Conservative management is proper in a patient obviously recovering from a penetrating wound of more than 36 hours duration. Such a patient usually has neither a bowel perforation nor continuing internal hemorrhage.

THE PENERATING AGENT

The destructive effect of close range shotgun wounds has been stated. The innumerable secondary projectiles from explosion, the caliber, velocity and jacketing of bullets are important. Number 22s are relatively benign; 38s and 45s often require resection due to traumatizing and explosive effect. Stab wounds that penetrate the peritoneal cavity may not injure viscera. Martin failed to find visceral injury in 31 of 37 cases of stab wounds in his series. The average mortality of stab wounds is approximately one-third of the bullet wounds. Pronounced

* Presented before the General Session at the Annual Meeting of the Oklahoma State Medical Association, May 23, 1951.

eviscerations often present very little shock and have uneventful recoveries. The most virulent infections follow the assailants' practice of spitting on the blade before plunging it in. For this reason abdominal wall tissue should not be closed tightly.

DIRECTIONAL COURSE OF PENETRATING WOUNDS

In most instances of bullet wounds the straight line rule is of considerable value. The correct interpretation of this rule is predicated upon the presence of a wound of entrance and exit or the presence of a palpable spent bullet in the subcutaneous tissue. However the supine position of the patient on the operating table probably was not the position of the patient at the time of the wound. The shift of mobile viscera with change of the position of the patient must be recalled. In the abscence of a wound of exit a study of a wound of entrance indicates at least the initial direction of the missile prior to deflection by bony parts. A concentric area of abrasion and contusion indicates the course to be penetrating visceral structures. If the area of abrasion is to the right of the edge of the wound it signifies that the missile has passed from right to left. The degree of undermining beneath the edge of the wound opposite the area of abrasion may indicate the obliquity of the course of the bullet. Since a spent bullet may fall away from its prior pathway, the position of a retained bullet in the roentgenogram should be used with caution to predict the visceral injury. The bizzare course of projectiles is due more often to the position of the patient at the time of the injury than to deviation or deflection by bony structures.

All penerating wounds which cause visceral injuries do not occur in the anterior abdominal wall. Sir Gordon Taylor reports that in only 60 per cent of the intra abdominal injuries seen in England during world war II was the wound of entrance in the anterior abdominal wall. In 20 per cent it had been in the back, while in the other 20 per cent the wound of entrance occurred in the buttocks. In the buttock wounds, richochet of the bullet is more prone to occur. Since half of the ribs cover the abdomen all penetrating wounds below the fifth ribs should be viewed as the possible source of abdominal perforations.

FACTORS DETERMINING PROGNOSIS

The prognosis depends upon four factors listed in decreasing degree of importance. These factors are the extent and type of visceral damage, the experience and judgment of the surgeon, the time between injury and treatment and the degree of hemorrhage. The variation in extent of visceral damage dependent upon the penetrating object has been discussed. Penerating injuries of the diaphgram, liver, stomach and pancreas, large vessels and the colon are accompanied by a most unfavorable prognosis. Penetrating injuries of such retro-peritoneal structures as the colon, pancreas, duodenum, associated as they are with retro-peritoneal damage are most often fatal. The lapse of time between operative intervention and the injury, hemorrhage with associated shock have become of lesser importance in the prognosis. The improved facilities for adequate and continuous blood replacement and the advent of antibiotic therapy coupled with the generous use of these agents by the surgeon has produced this change. The optimum time for abdominal casualties however continues to be preferably less than four and not later than six hours after the injury.

OBJECTIVE MANAGEMENT

A generous abdominal incision will reward the operator. Tht presence of a large amount of blood impels the surgeon to locate the source of the bleeding at the very beginning of the laparotomy. Then the abdominal viscera should be explored.

The multiple of two rule applies particularly to the small intestine. All of the small intestine must be visualized prior to determining definite treatment. Unless complete visualization is done, valuable time may be lost in closing perforations which are adjacent and require bowel resection. Mesenteric stripping of greater than five cm usually requires segmental resection. Mesenteric hematomas adjacent to the bowel require inspection of the mesenteric border of the bowel to eliminate a perforation. More deeply situated quiescent mesenteric hematomas are not disturbed.

With colon perforations, retro-peritoneal hemorrhage and spillage produce virulent infections. Flank drainage is preferable in injuries of ascending and descending segments. If simple closure is feasible, proximal decompressive colostomy is preferable. If damage necessitates resection, exteriorization is attendant by better results than primary anastomosis.

The spleen, liver and stomach, and less often the doudenum and pancreas are in-

jured simultaneously. Any spleen injury, regardless of how trivial, is indication for splenectomy. Few gastric perforations are single. Suture of the liver is not often successful and better results follow the use of a gelfoam or if necessary a gauze pack. Simple closure of the doudenum is mandatory. Adequate drainage for pancreatic wounds is preferable.

Bladder perforations are closed and either suprapubic or urethral drainage instituted. If the damage to the kidney is confined to the parenchyma or capsule and in some instances perhaps the pelvis, conservative surgery is attended by good results. Damage to the vascular pedicle requires a nephrectomy. Occasionally the patient may not have an opposite kidney.

Rectal impalements warrant a separate discussion. The penetrating object may enter the rectum through the anus or pierce the perineum and secondarily perforate the rectum. Most often the perforation is located on the anterior wall of the rectum and within reach of the palpating finger. The investigation should include the type of penetrating object, a sigmoidoscopic examination and a roentenogram of the abdomen for air under the diaphgram. If laparotomy is mandatory, possible injured viscera include the bladder, ureters and small bowel. Other injuries have been reported. The abdominal exploration should be thorough. The laceration should be closed, a temporary colostomy performed and the peri-rectal space drained by perineal route.

CONCLUSIONS

1. Few exceptions exist for operative intervention in penetrating abdominal injuries.

2. The value of a knowledge of the course of the penetrating object and the use of the rule of multiple of two for perforations is emphasized.

3. The prime factor for prognosis is the extent and nature of the injury.

4. Systematic abdominal explorations should be done prior to the selection of definitive surgical treatment.

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MEDICAL SOCIETIES AROUND THE STATE

IS YOUR COUNTY LEFT OUT THIS MONTH? SECRETARIES ARE REQUESTED TO SEND THE JOURNAL REPORTS OF THEIR COUNTY SOCIETY MEETINGS SO THAT NEWS FROM EACH COUNTY SOCIETY CAN BE INCLUDED IN THIS MONTHLY FEATURE.

Grady-Caddo

Members of the Grady-Caddo County Medical Society met in Chickasha for their last meeting.

Tri-County

The Tri-County Medical and Pharmaceutical Association and auxiliary recently held a dinner and scientific program in Hugo. H. G. Muehmore, M.D., director of the out-patient department at University Hospitals, Oklahoma City, was guest speaker.

Tulsa County

Charles G. Stuard, M.D., Tulsa ophthalmologist, was speaker at a recent meeting of the Tulsa County Medical Society. His paper was entitled "Surgery for Cataracts."

Ottawa-Craig

Information on the Ottawa-Craig county Medical Society can be found elsewhere in the Journal under the article about 50 Year Pin awards.

Jackson County

M. M. Appleton, M.D., Oklahoma City, was guest speaker at a meeting of the Jackson County Medical Society held recently in Altus.

Cleveland County

Guest speaker at the November business meeting of the Cleveland County Medical Society in Norman was George H. Garrison, M.D., Oklahoma City.

THE USE OF BANTHINE IN THE TREATMENT OF DUODENAL ULCERS*

THOMAS E. JOHNSTON, M.D.
OKLAHOMA CITY, OKLAHOMA

Numerous preparations have been developed during the past two decades for use in the treatment of gastric and duodenal ulcers. A few of these preparations are, the aluminum compounds, the tri-carbonates, various anti-spasmodics, the old standby, tincture of belladonna and more recently a steroid compound. All of these drugs afforded varying degrees of relief for a time and in the milder cases effectually controlled the ulcer and relieved the discomfort, but in the more severe cases, relief was only temporary or partial and the ulcer either persisted or recurred despite their continuous use plus a limited diet. If the ulcer failed to recur vagotonia returned to either partially or completely incapacitate the individual for varying periods of time, usually in the spring or autumn.

Grimson, Longino and their associates reported that Banthine (Methantheline bromide) produced prolonged depression of gastro-intestinal motility and usually depressed HC1 secretion and that the action thus produced was in effect a partial medical vagotomy when the medication was used in adequate dosages. Their report was so encouraging that the writer lost no time in obtaining some Banthine for use in the treatment of his own ulcer and later that of some of his patients.

Since March 1950, I have administered Banthine regularly to 145 patients for periods varying from three to 15 months with unusually gratifying results. During the earlier months of its use, administration was limited to patients who had demonstrable ulcers as revealed by roentegenological studies, and prcgress roentenograms were obtained in four to six weeks after treatment had begun. In the latter months of treatment, Banthine was used in cases who had had demonstrable ulcers at some previous time but who had only minimal to marked deformity of the duodenal bulb just prior to inception of therapy.

The majority of the patients treated in this series of cases were young men. The average age for the group was just a fraction under 32 years, and the average duration of the affliction was 6.8 years. Practically all of the patients developed ulcers during their period of service in World War II and had been receiving conventional therapy with only temporary or partial relief. Eleven of these young men had experienced perforation and 26 had had one or more major hemorrhages. An additional number had had tarry stools at irregular intervals usually preceded by weakness, vertigo and syncope. Only two cases had to discontinue the drug because of intolerance. The remaining 143 patients obtained relief when the proper dosage had been determined.

The symptoms usually disappeared within 48 hours, but in approximately 15 per cent of the patients, full relief was not obtained for periods varying from seven to 21 days. Sixty-five per cent of the patients required the use of some anti-acid preparation for neutralization of excess hydrochloric acid, but in these patients the use of aluminum preparations was much less frequent than in the past. In all cases metamucil was prescribed because I have found that even though the individual is not constipated, the use of a good bland bulk aids in prevention of gaseous distention and permits the effective use of smaller doses of Banthine.

Typical comments were: "Doctor, that is miracle medicine. I am getting along fine and I can't thank you enough for the relief." Also, "This medicine does the work when the going is the worse." Perhaps the most illuminating remark was, "Doctor, I have obtained relief for varying periods of time by the use of other medicines, but never have been so assured that continuous relief is within my grasp."

Progress roentgenograms at the end of four-five weeks revealed disappearance of the ulcer in 141 cases. The two patients who failed to show healing at this time were continued on medication but the dosage was increased and later fluoroscopic and x-ray

Reviewed in the Veterans Administration and Published with the approval of the Chief Medical Director. The statements and conclusions published by the authors are the result of their own study and do not necessarily reflect the opinion of policy of the Veterans Administration. Dr. Thomas E. Johnston is a full-time employee of the Veterans Administration Regional Office, Oklahoma City, Oklahoma.

studies disclosed healing. When the individual patient had been satisfactorily established on his maintenance dose (varying from 25-100 mg.) he was told that he could eat any type of food but advised that it was not desirable to use pork or rough foods too regularly. In all cases, as has been my custom for some time, defatted milk was substituted for the whole milk or milk and cream previously used. Substitution of defatted milk in the diet for whole milk or milk and cream apparently does two things: First, the individuals who have gained excess weight, especially in the abdominal area, lose it fairly rapidly and second, its use prevents the formation of troublesome quantities of gas and the patient develops an appetite for other foods. All of these patients were told that they were free to take a bourbon and seltzer water highball after any meal if they so desired.

BANTHINE USE IN OTHER CASES

Three patients with doudenal ulcer and one psychoneurosis with G. I. Conversion symptoms had the additional diagnosis of erythema multiforme. In these cases the oral and cutaneous lesions were relieved in 12-24 hours and marked regression of the lesions was noted within 48 hours. These cases were referred to me by a dermatological specialist who noted in their history that just prior to the appearance of the oral and cutaneous lesions the patients had experienced acute exacerbations of their gastrointestinal lesions. At this time some two months later, lesions had not reappeared.

Banthine was used in one case of gastric ulcer with dramatic results. This 50-year-old male obtained complete symptomatic relief within 12 hours and has remained continuously asymptomatic. The initial roentgenogram revealed the presence of a large crater on the lessor curvature of the stomach. Progress x-rays in four weeks revealed marked dimunition in the size of the ulcer and the eight weeks fluoroscopic and x-ray studies revealed complete healing. The patient is still maintaining symptom free and is very happy with relief obtained.

Only one case of chronic ulcerative colitis was seen during the past 15 months. This patient came in complaining of persistent hunger and weakness despite frequent bland meals. He weighed just 131 pounds and was 73 inches in height. The patient's history and roentgenological studies suggested that he was experiencing the dumping syndrome. After being placed on 100 mg. Banthine dosage he was able to satisfy his hunger with regular meals and at the end of seven days, had gained five pounds. Within three or four weeks he felt able to return to work, The initial roentgenographic study in this case revealed a markedly moth-eaten appearance of the mucosa of the large intestine. Follow up studies in the case were not available because the patient moved away.

TOXICITY

The side reactions of Banthine were found to be usually rather mild although a few patients complained of excessive dryness of the mouth. It was found that this dryness could be markedly mitigated by having the patients chew gum during that period of time. Three patients had to make three attempts at taking Banthine, quitting in each instance in three or four days, but finally they persisted and found the dryness much less noticeable after several days of treatment and maintained on treatment.

Dimunition or slowing of the urinary stream was not noted in this group of patients perhaps because of their youth.

Full doses of 100 mg. were given only to those patients who were nauseated, vomiting or experiencing intractable pain or hemorrhage and in even these cases, it was usually possible to discontinue taking the night dose within seven days. A few of the older patients experienced some visual disturbance, i. e., frontal and occipital headaches, but these cleared up in six or seven days unless the patient was in need of spectacles.

Except in the more severe cases, the patients were given an initial dose of one tablet (50 mg.) every six hours. A few of these cases required a later increase to one and one-half tablets (75 mg.). The patients were advised to space their meals approximately six hours apart and instructed to take the medicine from 30 minutes to one hour after meals. The timing of the dosage depending on the promptness with which post meal pain appeared. All of these patients were instructed to disregard the night dose unless awakened by pain. Occasionally it had to be taken but usually after two or three weeks, only at very infrequent intervals. None of the patients have developed any toxic symptoms that required discontinuance of the drug.

Use of an effective bland bulk seems to be indicated to produce maximum relief with a minimum dosage of Banthine. Also, after a period of time on the medication the patient appreciates the necessity of increasing his dosage in times of additional physical or emotional stress and is therefore enabled to pursue occupations hitherto interdicted to him because of his disability.

A number of patients who have been placed on Banthine prior to receiving treatment in this office were not getting effectual results because in numbers of cases, the medication has been given 30-45 minutes before meals. This pre-meal administration caused undue drying of the buccal mucosa at a time when the saliva was needed in proper mastication of food. Given at this time, it also caused too great a slowing of the digestive processes just when increased secretion was needed for proper digestion and also caused retention of food in the stomach for a longer period than was compatible with a feeling of well being.

SUMMARY

The majority of the patients under treatment tolerated the drug well. Those given the full dose of 100 milligrams every six hours were the severe acute cases and relief was obtained withous embarrassing or irritating side effect. The youthfulness of this group of patients is quite apparently the reason no urinary difficulties were encountered.

The use of Banthine, bland bulk and occasional anti-acids has permitted this young group of patients to work at jobs requiring heavy manual labor, such as: roughnecking in the oil fields, steel work, carpentry, stonemasonry, farming and other strenuous physical occupations. Another group that distinctly benefitted were people engaged in sales work on a commission basis.

CONCLUSIONS

1. Banthine has proven to be extremely effective in controlling the symptoms and healing the lesions of duodenal ulcer.
2. Continuous use of Banthine prevents the recurrence of the ulcer and precludes the eventual need for surgery.
3. Effectiveness of Banthine in the treatment and control of the lesions of erythema multiforme suggests its possible effectiveness in this and other dermatological diseases somewhat similar in nature.
4. The prompt relief and healing of the lesions in the gastric ulcer patient and the ulcerative colitis patient is encouraging but not conclusive.

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ROLE OF POTASSIUM IN THE BODY*

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Interest in the role potassium plays in the functioning of the body in health and disease has become greatly accelerated in the past few years as investigations have added to our knowledge of how potassium is utilized in the body in health and the various conditions whiich may be complicated by hypopotassemia or hyperpotassemia. Whether a patient survives his primary illness or not may depend upon our ability to suspect, diagnose, and correct hypo—or hyperpotassemia.

Potassium is one of the important cations of the body. It is found intracellularly. There is about 30 times as much potassium found in the body cells as in the body fluids. The liver and the muscles contain the majority of the body potassium. The normal serum potassium is 4-5.4 milliequivalents per liter or 16-21 mgm per cent.[1] The intracellular potassium is about 115 milliequivalent[2] per liter or 23 times the serum potassium. The total potassium content of the body is about 4,000 milliequivalent (160 gms) of which 70 milliequivalent (2.7 gms) is in extravellular fluid. Serum potassium is too low if 3.5 milliequivalents per liter or less and too high if 6.5 milliequivalents per liter or above. The height of the serum potassium is almost always a direct action of the concentration of intracellular potassium.

The normal daily requirement of potassium is estimated to be between 50 and 100 millequivalent.[3] Individuals on a normal diet will ingest from 42-135 millequivalent of potassium daily. Potassium given in excess of bodily needs to a normal individual is not retained over 24 hours in the body. The minimal excretion of potassium in individuals not receiving potassium is 1-90 millequivalent of potassium per 24 hours.[3]

The equilibrium between intracellular and extracellular potassium is constantly changing. Experiments using radio-active isotopes[4] have shown that cell membranes are permeable to sodium and potassium ions. Radioactive potassium ions require 15 h. to reach equilibrium with intracellular potassium. Evelyn[5] by using radioactive potassium found that when potassium is added to blood serum there is a reciprocal exchange of potassium ions between the serum and the red blood cells. In his experiments 1.6 per cent of the potassium of the red blood cells was exchanged in each direction each hour. This exchange is more rapid in other cells of the body. Potassium is constantly being excreted in the urine by the kidneys. The renal mechanism seems to be designed more for the excretion of excess potassium than for the conservation of potassium. Losses can be greatly exaggerated by diuresis, acidosis and adrenocortical hormone. There are also a number of other factors that enter into the constantly changing equilibrium between intra- and extracellular potassium. Gastric juice[6] contains some 40 milliequivalent per liter of potassium. Most of this is usually reabsorbed but in vomiting or gastric lavage or suction, most of it is lost to the body. There are about 10 milliequivalent of potassium lost each 24 hours in the stool. Diarrhea increases this loss. This amount of potassium ingested in food each day is a factor. Cellular breakdown as occurs in starvation trauma or disease causes a change in equilibrium.[7] With each gram of nitrogen released from cell breakdown 2.4 gm. of potassium are released from cells to the extracellular fluid. Glycogenesis carries potassium from the extracellular fluids into cells, especially the cells of the muscles and liver and can be increased by the ingestion of glucose and the injection of insulin and epinephrine.[8] Expansion or contraction of extracellular fluid will cause a shift in equilibrium.

The function of potassium in the body is not entirely clear. In order for potassium to go from the plasma where concentration is low into cells where concentration of potassium is high energy has to be expended.[5] This energy is thought to come from the utilization of glucose. Insulin and epinephrine both seem to cause more potassium to move into cells.[7] Potassium occurs intracellularly in an ionized state and in colloidal state. Potassium in turn seems to be necessary for the normal enzymatic processes in the carbohydrate cycle of metabolism. Potassium seems to play a role in

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muscle activity. During muscular activity potassium is lost from the cells in exchange for sodium. This loss is in some way related to actual contraction of the muscle or its immediate recovery phase. It plays an important role in the normal functioning of the neuro-muscular synapse. Potassium injections will re-establish contraction from nerve stimulation in a muscle previously paralyzed by curare. Schrader[9] in 1937 showed that rats fed diets low in potassium failed to grow at a normal rate. They were weak and listless, the hair tends to fall out and after several weeks the hearts of these animals showed areas of myocardial necrosis. Darrow and Miller [10] in 1942 were able to produce the same type of heart lesions in rats by feeding them a diet low in potassium and high in sodium and by giving them repeated injections of desoxycorticosterone acetate.

Under normal conditions we do not have to worry about the potassium in our bodies. As long as we are able to eat a well balanced diet our potassium intake will be adequate. Any excess intake over body needs will be excreted in the urine and stool. Even under diseased conditions if we are able to eat even a relatively balanced diet there is very little chance of the body concentration of potassium becoming so depleted as to be dangerous and if renal secretion is maintained there is no danger of developing hyperpotassemia.

Because of the importance of a normal intra- and extracellular concentration of potassium in the body, one should be familiar with the various diseased conditions in which the concentration may be increased or decreased. It is important to know the symptoms and findings characteristic of too much or too little potassium and to know what measures are necessary in order to try and return potassium concentration to normal.

Hypokaliema results from a number of different pathological conditions. Obligatory excretion in excess of intake will in time lead to a deficiency in potassium ions. This can be hastened by dehydration, trauma, shock, hemorrhages and sometimes surgical procedures. Conditions in which large amounts of fluids are lost by vomiting, duodenal drainage, drainage from fistulae, diarrhea, cholera, steatorrhea and pyloric obstruction will lead to hypokaliemia. The giving of fluids free of potassium over a period of time to a patient who is not eating may lead to hypokaliemia. There are rare conditions in which potassium is not absorbed from the intestinal tract in adequate amounts.

The administration or overproduction of some of the adrenal steroids may accelerate the excretion of potassium by the kidneys and lead to hypokaliemia. This has been observed by investigators in individuals who have been given desoxycorticosterone, adrenocortical extracts, ACTH and cortisone. In some cases of Cushing's syndrone associated with hyperactivity of the adrenal cortex a potassium deficiency may develop. Adrenal metaplasia in children and babies may lead to virilism and often to electrolyte embalance.

The importance of cellular exchange in producing a diminution of potassium concentration can be inferred in other disturbances of hydration, in familial periodic paralysis and in some cases receiving insulin, testosterone and glucose.

Potassium deficit may be found in both acidosis and alkalosis and must be corrected before the acidosis or alkalosis can be controled. Darrow[11] has shown that most cases of acidosis involve deficits of water, sodium, potassium and chloride. Potassium is lost through renal excretion and sodium is transferred from extracellular fluid into the cells to replace the lost potassium. This is thought to explain the resulting acidosis even though chlorides are lost in the urine. Alkalosis due to vomiting may show low potassium concentrations if abundant potassium free fluids are not available. Alkalosis resulting from potassium deficit occurs in some cases of Cushing's syndrome. A low serum chloride and potassium concentration develops and a high bicarbonate level occurs. The initial alkalosis developing during duodenal suction is at first due to the loss of chlorides. Administration of salt solution permits the kidneys to excrete potassium. If not corrected the serum bicarbonate level becomes high within a few days while the serum chloride and potassium drop. Occasionally high bicarbonate low chloride and potassium serum levels develop after a surgical operation without much loss of gastrointestinal fluids. This is thought to be due to the adrenocortical secretion resulting from stimulation by the hypophysis in response to trauma.[12] Injections of ACTH and cortisone may induce a deficit of potassium in

the serum and alkalosis.[11] The correction of alkalosis and restoration of the bicarbonate concentration in the blood serum to normal requires the retention of as much as six milliequivalents of potassium per kilogram of body weight and takes place rapidly after six days of potassium therapy.[11]

Diabetic acidosis is one of the most common and important conditions associated with hypopotassemia. The recognition and correction of the hypopotassemia may mean the difference between recovery and death. The hyperglyceria per se is not considered to cause a loss of potassium. In diabetic acidosis there is an increase breakdown in body cells with release of potassium into the extracellular fluid. Polyuria develops. Glucose and keto acids are excreted in large quantities carrying off much fixed base.[13] Vomiting enhances the loss of water, fixed base and chlorides. Potassium is lost in large quantities. Extracellular dehydration develops with loss of sodium and chloride ions and intracellular dehydration with loss of potassium and phosphate ions develops.[14] As the patient becomes worse food intake ceases and the urinary output decreases but potassium still continues to be released from the broken down cells of the body. When first seen, the serum potassium may be normal or slightly elevated. Within 2-18 hours of beginning treatment the concentration of the potassium in the serum begins to fall. The cause of the low serum potassium is two-fold. First by giving adequate amounts of fluid the extracellular fluid is expanded thus diluting the potassium ions present and secondly there is a shift of potassium back into the cells as a result of giving insulin and the oxidation of glucose. The fall in serum potassium should not only be looked for but anticipated and treated vigorously, making sure however, that good renal function has been restored.

The potassium level may be low, normal or high in uremia.[1] Hoffman[14] states that an intake of 70 milliequivalents of potassium requires a potassium clearance of only 10 cc of plasma per min. by the kidney to maintain a normal concentration of potassium in the serum. Since 130 cc of plasma are cleared of potassium by glomerular filtration the normal kidney tubules must reabsorb 90 per cent of the filtered potassium to keep from exhausting the body supply. Actually more potassium than is filtered reaches the absorbing tubules because some potassium is secreted by the secreting kidney tubules.[15] Osmotic diuresis, excretion of large quantities of acid and hormonal inhibition influences tubular reabsorption. Whether potassium concentration is less, normal or high in uremic states depends upon the extent and location of the kidney pathology.

The diagnosis of hypokaliemia depends upon a knowledge of the type of case in which it may occur, keeping in mind that it may occur and then verifying it by determining the concentration of potassium in the serum. Determination of the concentration of potassium by using the flame photometer is the most accurate method. There are suggestive symptoms and changes in the electrocardiographic tracings that are very suggestive of hypopotassemia. A low blood pressure with a widened pulse pressure, abdominal distention, paralytic ileus, parathesias of the extremities and paralysis of skeletal muscles are highly suggestive of hypopotassemia.

Bellet et al[16] have observed five different patterns in their electrocardiographic tracings taken on individuals with hypotassemia. They used the conventional limb leads and also CR_2, CR_3, CR_4, and CR_5. In their experience leads CR_2, CR_3, and CR_4 gave the clearest indication of low potassium concentration. Sixty-four of 79 patients showed patterns one and two. The first pattern showed depression of the ST segments with lengthening of the QT intervals. The ST segments may be so depressed as to resemble an inverted T. Pattern II showed prolonged QT intervals, inversion of the T waves and frequently prominent U waves. Pattern III showed prolonged QT intervals with upright T waves occupying almost the entire RT or ST intervals. In pattern IV the T waves were almost isoelectric and were followed by prominent U waves. The QT intervals were difficult to measure. Bellet and his coworkers feel that it is more accurate to measure the QU intervals. In pattern V the QT intervals were not prolonged. The T waves were quite normal in appearance but the U waves were very prominent and came almost as soon as the downstrokes of the T waves touched the isoelectric line.

The QT intervals were about .504 seconds for serum concentrations of potassium below four milliequivalents per liter.

Electrocardiographic tracings are of no value in cases that have been treated with digitalis or quinidine or in cases of anoxia, coronary occlusion, pulmonary embolus,

shock-like states, hypertension or in certain other cases that have myocardial damage. Hypopotassemia is the most common cause of prolonged QT intervals. Hypocalcemia may cause prolonged QT intervals but the T waves are unaltered and there is an isoelectric period between the S and T, or R and T waves.

The treatment of hypopotassemia may be two-fold: prophylactic to prevent the condition from developing and active treatment to correct the low concentration after it has developed. Randall[6] has found that by giving two grams of potassium daily by mouth preoperative and postoperative a negative potassium balance could be prevented. Martin[17] states that potassium deficiency may develop in about 16.3 days on a poor food intake. Low potassium levels will develop after 5.3 days of gastric suction if there has been a poor food intake for 7.5 days preceding the beginning of suction. 3-6 gms of potassium in a one per cent two per cent solution of potassium chloride may be given each 24 hours as a prophylactic dose.

The active treatment of hypopotassemia is best carried out by giving potassium in the form of potassium chloride by mouth or stomach tube when these routes are available. There is far less danger of toxic reactions when potassium is given this way for in the presence of normal kidney function an over-dose of potassium by mouth is practically unknown. Three-tenth grams in divided doses by mouth may be given every 24 hours until the deficit is controlled. Concentrated meat broths too are of value because of their high content of potassium.

Potassium can, when necessary, be given subcutaneously or intravenously. Extreme caution must be used if kidney function is poor. Martin's[17] plan of treating hypopotassemia is as follows:

If the deficit is acute six-nine gm of potassium should be given every 24 hours in a one per cent-two per cent solution of potassium chloride. In the severe chronic states of potassium deficit 20 gms of potassium should be given every 24 hours. The 20 grams may be given in a three per cent-one per cent solution intravenously or 10 grams of potassium chloride may be given intravenously and 10 grams orally every 24 hours. A useful solution that may be used either intravenously or subcutaneously consists of one part potassium chloride and two parts of glucose. The addition of phosphates to the intravenous solution is indicated in treating diabetic acidosis. Butler and Talbot's solution contains 30 millequivalent of sodium, 22 milliequivalent of chloride, 15 milliequivalent of potassium and three milliequivalent of phosphate per liter of five per cent-ten per cent glucose solution. Darrow's solution contains four gms sodium chloride, 2.7 gms of potassium chloride and 52 cc of molar sodium lactate per liter. The total amount of this solution should rarely exceed 80 cc per kg of body weight per 24 hours and should require four or more hours to give. This solution works well if potassium deficit and acidosis exist at the same time. Darrow[18] has demonstrated that infants having diarrhea recover much faster if given potassium and have a much lower mortality rate. If alkalosis and hypopotassemia[11] exist at the same time in a patient a solution containing six grams of sodium chloride and 2.7 gms of potassium chloride per liter is indicated. This solution may be given subcutaneously. If it is given intravenously, dilute one part with two-thirds parts of five per cent-ten per cent glucose in distilled water. The sodium chloride concentration in the solution may be decreased as the sodium deficit is corrected. Investigators have found that it may take four to six days to repair and correct potassium deficit in a patient.

Hyperpotassemia occurs in cases of renal failure, advanced dehydration, shock and adrenal insufficiency. It is possible to give potassium intravenously rapidly enough to produce toxic symptoms. It is almost impossible to give potassium by mouth fast enough to produce hyperkaliemia except in cases of renal failure, shock or adrenal insufficiency. It is unlikely that potassium concentrations ever reach lethal levels in Addison's disease.[19]

The diagnosis of hyperpotassemia depends upon the knowledge that this condition may develop to complicate cases of renal failure, dehydration, shock and adrenal insufficiency. Symptoms and signs plus electrocardiographic tracings are very suggestive and finding an elevated concentration of potassium in the blood serum clinches the diagnosis. The principal symptoms of this condition are listlessness, mental confusion, numbness, and tingling and feeling of heaviness of the extremities, sometimes flaccid paralysis of the extremities, cold gray pallor, poor heart tones, bradycardia at first and totally irregular heart rate, low blood

pressure and vascular collapse. The heart stops beating in diastole.

The electrocardiographic tracings show an increase in height of the T waves with steep ascending and descending limbs, sharp apex and narrow base. The QRS intervals become widened and the P waves become small and may entirely disappear. Intraventricular conduction defects simulating bundle branch block may develop. At what serum potassium levels symptoms occur is not exactly known. Serum concentration of potassium above 5.4 milliequivalent are higher than normal. Symptoms of electrocardiographic changes are more marked if the serum concentration of potassium increases rapidly. Uremia was present in all 13 cases of hyperpotassemia reported by Keith.[20]

The treatment of this complication is not satisfactory, probably because of the severity of the primary illness. Potassium should not be given. Injections of glucose, insulin and sodium chloride may help temporarily by shifting the serum potassium into the cells of the body. Injections of calcium are indicated if there is a deficit of that ion. The use of the cation exchange resins to absorb potassium ions from the walls of the intestines may prove in time to be useful.

At present the determination of whether there is hypopotassemia, normal serum concentration or hyperpotassemia is accomplished by measuring the concentration of potassium in the serum. This is best done by the use of the flame photometer. The apparatus is expensive but the method is cheap, quick and accurate. The concentration of potassium in the cells cannot be determined by ordinary clinical methods. Symptoms seem to depend upon the serum concentration rather than the concentration of potassium in the cells. It seems reasonable, however, to think that as our knowledge increases we will find that the intracellular concentration of potassium is even more important than the extracellular concentration of potassium and that simple methods for its determination will be discovered.

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OKLAHOMA STATE MEDICAL ASSOCIATION

ANNUAL MEETING

MUNICIPAL AUDITORIUM OKLAHOMA CITY

MAY 19, 20, 21, 1952

TREATMENT OF MYOCARDIAL INFARCTION DUE TO CORONARY THROMBOSIS

A Preliminary Report

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The treatment to be outlined in this paper was not intended to question the merits of other treatments but was organized in hopes of reducing the present intitial mortality due to myocardial infarction. All the drugs and procedures used have been used previously, but not as a routine procedure.

A group of 80 cases treated in private practice by the author constitutes the basis for this report. All cases demonstrated diagnostic evidence in the electrocardiogram of myocardial infarction. This diagnosis was made only when definite breakdown in the QRS complex was present. Patients with only T-wave changes indicative of ischemia were not included in this report for obvious reasons. Patients can have transitory myocardial ischemia (demonstrating primary T-wave changes in the electrocardiogram) and not develop myocardial infarction. Complete uniformity of treatment was attempted throughout this series. One year ago, one change was made. In selected cases, aqueous heparin was given intravenously for the first 48 to 72 hours while the slower therapeutic effects of dicumarol were taking place.

IMMEDIATE TREATMENT

When a diagnosis of myocardial infarction was made in the office, hospital or at home, the patient was immediately given morphine sulfate 16 mgm. (one-fourth gr.) and atropine sulfate 0.43 mgm. (1/150 gr.) intravenously or subcutaneously as dictated by the severity of the pain. This dose was repeated by the desirable route of administration when necessary to control pain. Quinidine sulfate 0.2 gm. (three gr.) was given orally. Demerol, dilaudid, pantapon, and other drugs were not used. At least 15 to 20 per cent of patients with myocardial infarction have nausea and vomiting due to their disease. Therefore, differentiation of the causes of nausea or vomiting due to the disease from those due to morphine sulfate might prove difficult or impossible. There did not appear to be any greater increase in nausea and vomiting. Atropine sulfate was used in conjunction with morphine sulfate to allay gastro-intestinal nausea and vomiting as well as apprehension. In addition, it was felt that atropine sulfate might decrease the vagal reflex which may lead to the introduction of a cardiac arrhythmia, particularly ventricular tachycardia or fibrillation. The pharmacologic action of atropine sulfate is such that some vasodilatation of the small arteries and arterioles supplying the myocardium, particularly in the ischmic zone surrounding the central area of the myocardial infarction, might result.

Sudden cardiac death often occurs as the result of ventricular tachycardia, ventricular fibrillation or ventricular asystole. Many reports indicate that quinidine sulfate is used only when extrasystoles develop. It is reasonable that, since quinidine sulfate is the drug of choice in the treatment of the severe arrhythmias, it might be wise to attempt to prevent them. In some patients extrasystoles may have occurred during the night when close observation was not usually obtained. Only a few of the patients had special nurses to check the pulse at frequent intervals.

EARLY HOSPITAL MANAGEMENT

All patients were hospitalized immediately. Morphine sulfate 16 mgm. (one-fourth gr.) was continued as needed to control pain, every one to four hours. The nurse knew immediately that the medication could be given as needed for relief of pain. Quinidine sulfate .02 gm. 3 gr.) was continued every four hours, day and night. At the end of two weeks the dosage was reduced to 0.2 gm. (3 gr.) every four hours during the day and 0.4 gm. (6 gr.) at bedtime. In view of the slight accumulative effect, this dosage was believed to be sufficient to maintain the patient through the night.

Anticoagulants: Dicumarol 300 mgm. was given on admission to the hospital. A prothrombin time was done daily and the

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dicumarol dose adjusted to the requirements of the individual patient. Usually, it was necessary to give 200 mgm. of dicumarol on the second day, and, at times, on the third day. The prothrombin time was maintained between two and one-half to three times the control prothrombin time. In most instances, dicumarol was continued until the patient became ambulatory. After the second or third week, prothrombin times were done one to three times a week. The daily maintenance dose of dicumarol was 75 mgm.

The anticoagulant effects of dicumarol were supplemented by those of aqueous heparin in 50 mgm. doses intravenously every four hours, day and night, for the first 48 to 72 hours, until the prothrombin time had time to reach a therapeutic level. Heparin was used in the patients with very extensive infarctions, in patients with previous infarctions, or in elderly patients. No known extensions of the original infarction were observed on this regime.

Oxygen: Oxygen was given routinely at a rate of five liters per minute by nasal catheter. The catheter gives an oxygen intake just as high as the ordinary mask or oxygen tent. On several occasions a Bennet mask and valve were used with 100 per cent oxygen at a rate of 15 to 20 liters per minute. Ashen, cyanotic patients improve immediately, the pulse slows, and blood pressure rises. The results will be very gratifying to patient and physician in many instances.

Shock: Previous reports state that the mortality rate in patients with myocardial infarction and a systolic blood pressure below 100 mm. of mercury has been twice as high as in those cases who maintain a systolic blood pressure above 100 mm. of mercury. For this reason, when the blood pressure dropped to the range of 100 mm. of mercury desoxyphedrine in five mgm. doses, not exceeding 25 mgm. per day, was usually used, or a marked fall in blood pressure was treated with doses as high as 10 mgm. intramuscularly immediately, and continued with 5 mgm. every four hours for the first 24 hours, reducing the dosage schedule on the second 24 hour period to the above mentioned total daily dose. The blood pressure routinely improved by 15 to 20 mm. of mercury. There were no apparent toxic manifestations. The patient should be observed closely and if excessive central nervous system stimulation occurs, sedation should be increased.

Intra-arterial transfusions of whole blood were not utilized.

Rest: All patients were treated at bed rest until the electrocardiogram revealed loss of injury (R-ST junction displacement) until the sedimentation rate returned to normal, and until the pulse and blood pressure were stabilized. The pulse usually stabilized first, later the blood presscre, thirdly the injury in the electrocardiogram, and finally the sedimentation rate. The reason for the variation in the duration of bed rest was obvious when one considers the varying sizes and severity of different infarctions. It was our opinion that a longer time would be required to heal the larger infarctions. By exploring at least six routine positions from V_1 through V_6 and frequently Vx, V_7, V_8, and V_9, and higher or lower lead positions, one can be quite sure of the anatomical size of the infarction. From this and other laboratory studies, it will be obvious that a small infarction might be treated at bed rest for four weeks, whereas an extensive infarction, several of which were included in this series, bed rest might be necessary for from three to four months. The work of Harrison and others has suggested early ambulation. It has been a well-established fact from a pathologic standpoint, that a white scar does not form in most instances under four to six weeks. Quoting the references of a 15 per cent incidence of rupture of the heart in myocardial infarction is erroneous, also, in that these reports, in most instances, came from mental institutions where the patients were maniacal and hyperactive. It has been the experience of this author and his close associates that rupture of the heart occurs at a frequency of two to three per cent in non-psychiatric patients.

Various work has suggested that the use of the bed pan greatly increases the metabolism and physical activity of the patient, thus increasing the heart rate and in turn, the strain on the heart. By using mineral oil, one or two ounces each night at bedtime, constipation can usually be prevented. The use of oil retention or plain water enemas can supplement this medication in the relief of patients who develop minor or major degrees of constipation.

Sedation: Early in the treatment of myocardial infarction, the use of morphine prevented the apprehension and nervousness of the patient, but later in the course of treatment, it was necessary in some patients

to use other drugs. In this group of patients, phenobarbital 32 mgm. (½ gr.) or sodium amytal 65 mgm. (1 gr.) four times a day was used. Pentabarbital sodium at bedtime can be used when needed.

Diet: In this series all patients were routinely placed on a 200 mgm. sodium liquid diet for the first 48 to 72 hours, until the patient began to stabilize. Distilled water was frequently used when pulmonary edema developed. Oklahoma City water supply was found to contain 10 mgm. of sodium per 100 cc. When the patient was taking 2,000 cc. of water per day, this would add 200 mgm. of sodium to his diet per 24 hours. After the first two or three days, the patient was placed on a 200 mgm sodium diet, and later on, a 200 mgm sodium select regular diet. The quality and sodium content of the diet was changed when the patient's condition warranted.

Miscellaneous: Digitalis and digitoxin have not been used in this group of patients except in two instances, where on the recommendation of a consultant, this preparation was advised.

Prevention of congestive failure by the abstinence of salt in the diet and water appeared satisfactory. Sodium removing resins (cation exchange resins) will be a further adjunct to the prevention and/or treatment of congestive failure in these cases in the future.

The place of alcohol in therapy of acute myocardial infarction is questionable. Alcoholic beverages have been used when indicated for "sedation" or upon the patient's request. Patients obviously could not smoke while receiving oxygen, in the early portion of their disease, and later, we explained that we have no scientific proof that tobacco produces dilatorious effects on the coronary arteries. About 10 per cent of the patients can precipitate anginal attacks by the consecutive smoking of two cigarettes. The general disadvantages of smoking were discussed. The patient made his choice, most returning to smoking. If extrasystoles developed, we advised them to abstain from its use.

CONVALESCENT TREATMENT

As a general rule, patients were given a period of convalescence approximately equal to the duration of their bed rest. However, this period was varied to suit the individual case, using as a gauge, the progress of the electrocardiogram, sedimentation rate, pulse, blood pressure, tolerance to activity without pain or shortness of breath, etc.

All patients have returned to their previous occupations, except in a few instances where they were doing extremely heavy physical labor, and in these, they were rehabilitated or reassigned to a lighter job commensurate with their physical ability. All patients returned to work, usually in three to four months.

To our knowledge, there have been two cardiac neuroses, and in both of these it was quite severe. One patient's good friends brought issues of *Esquire*, *Saturday Evening Post*, and other lay magazines to him while he was hospitalized to give him a "full education" on the pathogenesis, pathology and restrictions of his disease. From his cardiac standpoint he did well, but from the psychiatric standpoint it was necessary to see him at weekly intervals. On the weekly followup psychotherapeutic visits, he has shown marked improvement and has returned to work. The other patient also returned to work, in spite of the encouragement given him by his wife to remain an invalid.

Quinidine sulfate was continued in the above dosage after meals and at bedtime, until healing had occurred. The patient was encouraged to use nitroglycerin freely. Important to mention to the patient was the fact that nitroglycerine does produce "pounding in the head" and at times, headache. We cite the case of one patient who realized that he became short of breath on two different holes on the golf course. He was advised to take a tablet of nitroglycerin prior to playing these two particular holes and he has found that he can prevent the shortness of breath.

COMMENTS

Emphasis must be placed on the fact that the dosage of quinidine sulfate varied in individual patients. Some required 0.1 gm. (one and one-half gr.) every three hours to prevent extrasystoles, whereas 0.2 gm. (three gr) every four hours produced abdominal cramps and diarrhea. In other patients, extrasystoles developed and quinidine sulfate was increased to 0.4 gm. (six gr.) every four hours.

We should make some statement of explanation as to why some drugs were not em-

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ployed in this series of cases. Pronestyl and Tromexan were developed after the institution of this regime. Conrad found Tromexan inadequate in that too frequent prothrombin times were necessary to observe its effects, and the wide swings in its effects were difficult to control. Aminophyllin and papaverine were not used because of their questionable efficacy. Repository heparin (such as Depoheparin) was not used because of the added expense of the drug. Three hundred mgm. has been advised by Wright and others as an initial dose, repeating with 200 mgm. at 12 hour intervals, if the Lee White clotting time was below 20 minutes. If the Lee White clotting time was above 20 minutes, then an additional period of time should elapse before repeating the dose.

Hemorrhage resulting from anticoagulant therapy (dicumarol) was seen in one case of emboli of the left kidney. The hemorrhage was not the result of the therapy. Another patient who had prostatic obstruction and required a retention catheter, developed minor hemorrhage due to irritation by the catheter, but did not require treatment. One patient with a chronic pyelonephritis had an extension of an old infarction associated with severe congestive failure and uremia. He developed hematuria of considerable magnitude on the day prior to death. This is the only death associated with significant hematuria. In this case, it was difficult to precisely evaluate the cause of the hematuria and or death, even though post mortem examination was done. Most likely it was the result of dicumarol therapy. The most dramatic hemorrhage was in a patient with a past history of peptic ulcer one year previously. He had a massive upper gastro-intestinal hemorrhage requiring emergency treatment. One fresh whole blood transfusion and seven additional blood bank transfusions were given over a period of 12 hours. This patient was given 144 mgm. of Vitamin K intravenously at 6:00 p.m. and with the transfusions, had a normal prothrombin time at 8:00 a.m., the following morning. In our experience, the above dose of Vitamin K has proven superior to smaller repeated doses in the therapy of anticoagulant induced hemorrhage.

RESULTS

Eighty patients were treated with 10 deaths on the above regime. Six of these deaths were in patients experiencing their initial attack. One died on the tenth day of treatment and at autopsy had complete thrombosis of the right main coronary artery, with a pinpoint left coronary artery. One died within two hours after entering the hospital and had thrombosis of the left main coronary artery and extensive atherosclerosis of the right main coronary artery. This patient never recovered from the intial shock. Another patient died with complete thrombosis of the left main coronary, seven hours after institution of treatment. Another, an uncontrolled, old diabetic, died on the twentieth hospital day following a mild insulin reaction. He had been admitted with a hemiplegia and the electrocardiogram revealed a recent myocardial infarction. The hemiplegia was apparently due to an embolus from a mural thrombus. Postmortem examination was not done. One of the original cases, who was also a diabetic, died 12 days after hospitalization, his diabetes being difficult to manage. Postmortem examination was not obtained, but cardiac rupture was thought to have occurred. One other patient died with the original infarction 24 hours after hospitalization, three days after onset of the attack. He did not recover from the initial shock. The remaining four deaths occurred in patients with second infarction. One of these expired four hours after his second admission to the hospital. Another had approximately 25 per cent, functioning, normal myocardium at autopsy, excluding the old and recent areas of infarction.

This gave a mortality rate of 7.5 per cent in cases who succumbed to the original myocardial infarction, and an over-all mortality rate of 12.5 per cent including cases with previous infarctions, old and a recent infarction. This compared favorably with previous reports. The mortality rate of initial attacks of acute myocardial infarction has been difficult to ascertain. Jacobs, in reviewing 88 cases found the mortality rate to be 19.3 per cent in cases experiencing the initial attack of acute myocardial infarction. Wright, et al, reported a 15 per cent mortality in patients treated with conventional therapy plus anticoagulants as compared with a rate of 24 per cent in cases treated with conventional therapy without anticoagulants.

SUMMARY

We have presented a routine procedure in the treatment of acute myocardial infarction, and have attempted preliminary evaluation of the results. The low incidence of mor-

tality in this series suggested that this may be nearing an adequate treatment. No changes in the routine were made throughout the course of this series, except for the addition of aqueous heparin in the first 48 to 72 hours and alteration in the dosage of quinidine sulfate to suit the requirements of the patient from an idiosyncrasy as well as a therapeutic standpoint. We personally believe that more oxygen and quinidine sulfate should be used, that shock should be combatted and that desoxyphedrine may be an effective agent in this regard. When possible, anticoagulant therapy probably should be given all cases of acute myocardial infarction, since it is impossible to predict which cases will have extensions of the original thrombus or which cases will occlude another artery with the decreased coronary flow, blood pressure, etc., the result of the initial attack. Sufficient time should be allowed at bed rest and for convalescence for recovery, but when this recovery has taken place, all patients should return to work for economical as well as psychiatric reasons.

Additional groups of patients will be treated in an attempt to evaluate bed rest, bed pans, oxygen requirements, quinidine dosages, etc.

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PLAN TO ATTEND

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March 17 and 18, 1952

CLINICAL PATHOLOGIC CONFERENCE

The University of Oklahoma School of Medicine
Presented by tht Departments of Pathology and Pediatrics

HOWARD C. HOPPS, M.D. AND HENRY B. STRENGE, M.D.
OKLAHOMA CITY, OKLAHOMA

DR. HOPPS: Diarrhea is a common symptom in infants and may reflect a variety of diseases. That was an initiating complaint here and the major problem for us today is determining the cause of this diarrhea. Several things about the history may seem a bit strange, but this case is one which was seen here almost six years ago, at which time therapy was of necessity quite different. Doctor Strenge will discuss and analyze the clinical aspects of this case.

PROTOCOL

Patient: B. D. W., white male infant, age three and one-half weeks.

Chief Complaint: Vomiting—seven days; diarrhea—six days.

Present Illness: This three week white male infant was in good health and said to have been doing well when he suddenly began to vomit after each feeding (one week before hospital admission). The next day he began to have diarrhea, 20-26 times daily. The nature of the stool was not described. Five days after onset of this illness a local physician was consulted and gave "medicine." Apparently this did not affect the course. History stated that the patient lost a "great deal" of weight during this period but the exact amount is not specified. Cyanosis developed two days before hospital admission.

Past History: This infant was apparently normal at birth, full term, delivered by forceps. Birth weight was six lbs. 14 oz. There had been no respiratory infections. Formula consisted of evaporated milk, oz. 6.5, water, oz. 11, and Karo, oz. one-half.

Family History: This was the mother's first child and it was stated that, "mother had uremia ante partum and is still sick." Father was living and well. There was no history of allergies, tuberculosis, diabetes or cardiovascular disease.

Physical Examination: Upon admission temperature was 103.2°; respirations 40; pulse not recorded. The child was emaciated and dehydrated—skin was dry and wrinkled; fontanelles were open and sunken. The baby lay quietly in bed holding himself still. There was "more or less tenseness of all muscle groups." Physical examination was done with the baby in an oxygen tent and it was stated that the examination was limited because a pronounced cyanosis developed when the baby was removed from the oxygen tent. Ears were negative to examination. There was a thin mucopurulent discharge from the nose. There was no lymphadenopathy evident. Respirations were shallow and somewhat jerky. Auscultation of the chest revealed normal tubular breathing with complete absence of rales. There were no cardiac murmurs. The abdomen was not distended; subcutaneous adipose tissue was "absent." There were no abnormal masses or solid viscera palpable. No rectal examination was done; the genitalia appeared normal. Reflexes could not be elicited due to hypertonicity of extensor muscle groups.

Laboratory Data: Upon admission RBC's numbered 3.97 cu.mm., Hb. 12 gm. per cent, WBC's 16,650 cu.mm. with 62 per cent neutrophils, one per cent eosinophils, 30 per cent lymphocytes, and seven per cent monocytes. No urine specimen was procured.

Clinical Course: The patient was given 30 ml. of M/6 sodium lactate solution intravenously and 15 cc. subcutaneously. Two hours later an additional 50 cc. of this solution was given intravenously. Temperature rose to 106.2° several hours after admission and tepid sponging was employed, lowering the temperature to 97°. Shortly thereafter it spiked to 101°; 5,000 units of penicillin (aqueous) was given intramuscularly and repeated q three hours. Cyanosis was apparently increased despite continuous oxygen (oxygen tent); 50 ml. of isotonic saline was given intravenously on the second hospital day. Later in the day cyanosis disappeared, but would quickly reappear if the baby were removed from the oxygen tent. On the second hospital day two cc. of calcium gluconate (four gr.) was given intravenously

with relief, for a short time only, of the "early tetany." The patient took fluid easily but seemed to have difficulty in swallowing. Much of the fluid returned through the nose. He was having an almost constant green liquid stool with no blood apparent, but containing a very small amount of mucus. Atropine gtts. II were given but the patient was still unable to take formula. A Breck feeder was used without success. Formula and all amounts of saline were given intermittently by gavage. On the third hospital day, while taking his formula, the patient became markedly cyanotic and respirations ceased. Coramine was given immediately and artificial respiration—spontaneous respiration returned but the patient remained slightly cyanotic and respirations were shallower than before. Cyanosis progressed and several attempts were made to give plasma intravenously, but these were unsuccessful. Cyanosis progressed and respirations became weaker and weaker, the baby did not respond to caffeine sodium benzoate, subcutaneously, and died on the third hospital day, 55 hours after admission. During the last 24 hours temperature varied from 98° to 100°.

CLINICAL DIAGNOSIS

DR. STRENGE: Considering the age of this infant, we should not overlook some conditions most often apparent in the neonatal period, the result of accidents and incidents at the time of delivery. The initial symptom, so far as we can tell from this history, is vomiting. The child appeared normal at delivery and did well for some two weeks when he suddenly began to vomit. Intestinal obstruction on a congenital basis is possible, but not probable. Most of such obstructions lead to vomiting earlier than this with the exception of pyloric stenosis. Intracranial disease can produce vomiting and intracranial disease is by no means infrequent in newborn babies, particularly as a result of trauma and hemorrhage within or about the brain. On the very next day of this patient's course a new symptom appeared that we must not minimize—a diarrhea of 20-26 stools daily is not a minor complication. With that violent a diarrhea in a previously healthy child whose only other symptom is vomiting, we must suppose some kind of infection. This is probably not the epidemic diarrhea of newborns, because this baby was at home alone and epidemics occur only where babies are together. However, it could be a viral diarrhea of the newborn period, or it could be a bacterial diarrhea. Five days after onset some kind of medication was given by the physician which did not affect the course except that two days later the child developed cyanosis. This cyanosis might just possibly be on the basis of medication. Bismuth sub-nitrate is frequently given in the treatment of diarrhea, may be reduced to nitrite in the gut and rarely produces cyanosis from methemoglobinemia. This is an unlikely possibility.

The only thing of particular interest in the history is the fact that delivery was by forceps — that might increase slightly the possibility of intracranial birth injury. The one important point mentioned in the family history is "uremia" in the mother; preeclampsia might increase the hazard of intracranial injury to the baby at birth.

Physical examination revealed fever and increased respiratory rate, tending to bear out our previous supposition of infection. the child was emaciated, markedly dehydrated—physical corroboration of the severity of the diarrhea previously described. The statement that the examination was limited because of pronounced cyanosis when the baby was removed from the oxygen tent indicates that the cyanosis was improved by oxygen. This excludes methemoglobinemia as a cause. Moreover, this improvement of cyanosis on breathing oxygen at increased tension suggests that it is on the basis of obstruction somewhere in the respiratory tract, as opposed to cyanosis associated with an intracardiac shunt. There was tenseness of all muscle groups and reflexes could not be elicited due to hypertonicity of extensor muscle groups. With a generalized hypertonicity of extensor muscle groups one might expect the child to be in opisthotonus. This is not mentioned. Fontanelles were sunken. I presume that the physical signs of meningitis were not present in this case since no lumbar puncture is described. The infection we are looking for probably does not involve the meninges, although we can't be sure of that in the absence of cerebrospinal fluid examination. The examination of the chest revealed "normal tubular breathing" with complete absence of rales. I cannot interpret this since tubular breathing is not normal in an infant; it is a sign of consolidation. Respirations are described as shallow and somewhat jerky. Sometimes we see fairly extensive cases of pneumonia in which respirations are so shallow that rales are not elicited. On the basis of this physical

examination one cannot rule out pneumonia as part of the disease process in this child. I presume that he was too sick for an x-ray to be obtained, since none is described.

So far as the laboratory data is concerned, we have only the blood count. There is an increase in the percentage of neutrophils over what one would expect in a baby of this age, corroborating our suspicion of an infection of some sort. The total white count is not increased when we consider how dehydrated this baby was. Bacterial cultures of the mucopurulent nasal discharge and of the stool would have contributed a great deal toward our evaluation of this case. So far, on the basis of physical and laboratory findings, I believe that this child probably had infectious enteritis with a superimposed pneumonia. I can not exclude meningitis. The neurological signs may well be a part of the acute infection with severe dehydration, possibly multiple thrombotic foci within the brain. On the other hand, they could be related to a brain injury incurred at the time of delivery.

The course in the hospital gives some further information, but not a great deal.

The amount of fluid given is hardly adequate for an infant as dehydrated as this one is said to have been. The dosage of penicillin, 5,000 units I.M. q three hrs. suggests that the date of this child's hospitalization was about 1945. Is this correct, Doctor Hopps? (Dr. Hopps replied, early in 1946) This dosage of penicillin would probably be considered homeopathic today. It does not seem to have produced much effect on the child's course. Cyanosis increased despite continuous oxygen. He was given some more fluid, but apparently not very much. Calcium gluconate was given with relief for a short time only of what is termed early tetany. Actually the signs described are not those of tetany. The child might well have had that form of tetany which may accompany severe acidosis. Usually though, it does not manifest itself until after the acidosis is corrected because with acidosis, even with a low serum calcium there is sufficient *ionized* calcium to prevent tetany. If we do see tetany in diarrhea it usually is after the acidosis has been corrected and I don't believe the acidosis was corrected by the relatively small amount of Na lactate given in this case. The cyanosis became worse, vomiting persisted and the child expired in spite of supportive therapy.

This is an interesting therapeutic problem as well as a diagnostic problem. We don't expect to make a specific etiologic diagnosis in severe cases of diarrhea such as this one. Our efforts are directed primarily at correcting the fluid, electrolyte and acid base disturbance. Faced with such a case as this today, I think that our administration of fluid would be much more intensive and that laboratory investigations as to the extent of acid base imbalance and Na and K disturbances would tell us the extent of abnormality here so that we could have corrected this imbalance. Whether or not we would have saved the patient's life is a totally different question. As to the etiology of this condition, today, we would assume that if this were a specific bacterial diarrhea it would not be sensitive to penicillin and would probably select some other antibotic. Ordinarily we trust the culture to indicate which of the antibotics would be most effective. Many of these children show infection with uncommon and peculiar organisms. In the neonatal period resistance is considerably less than at other ages, so that during this period diarrhea occasionally results from infection by Pseudomonas aeruginosa or organisms of the Proteus group. The fact that diarrhea was apparently associated with pneumonia in this case would not influence specific treatment particularly, since we usually give an antibotic which is absorbed to produce constitutional effect rather than one which acts locally on the intestinal tract.

My final diagnosis in this case is infantile diarrhea, probably on an infectious basis, complicated by pneumonia and possibly thrombotic phenomena within the brain producing the neurological symptoms described. A likely second possibility is some primary intracranial process such as intraventricular or subdural hemorrhage with superimposed enteric and respiratory infections.

ANATOMIC DIAGNOSIS

DR. HOPPS: This infant was quite emaciated at the time of autopsy—birth weight was somewhat over six and one-half lbs.; at autopsy weight was five lbs. 10 oz. The baby was still somewhat dehydrated. There was very little adipose tissue anywhere in the body. Upon opening the peritoneal cavity small and large intestines were seen to be moderately distended with gas — otherwise they appeared normal. The liver appeared essentially normal except for being a little

yellower and paler than usual. The spleen was slightly enlarged. On the whole the abdominal viscera were not remarkable, except for the moderate gaseous distention of the intestinal tract. There were no adhesions and no evidence of peritonitis. Examination of thoracic viscera revealed an essentially normal heart. It was a little smaller than normal for the age, but not small for the weight. There were no anomalies. The lungs together weighed approximately twice the normal and there were six foci of induration, 0.4 to 1.4 cm. in diameter, discolored dark red. They were widely distributed. In addition to these larger indurative areas there were very many smaller, yellow foci, less than 0.2 cm. in diameter, which appeared to be abscesses. When the tracheobronchial tree was opened, pus exuded from the smaller ramifications and when the lungs were sectioned numerous foci of suppuration were apparent. Furthermore, each pleural cavity contained a small amount of fairly thin fibrinopurulent exudate, so that early empyema was a part of this picture. The gastrointestinal tract was examined very carefully, grossly and miscroscopically. There were no changes to indicate a primary infectious diarrhea. The slight cellular infiltration of the lamina propria with moderate edema and hyperemia of the submucosa probably represents an *effect of* diarrhea. There were no ulcers or erosions and no inflammatory lesions which could be considered specific. Despite a clinical diagnosis of pylorospasm we found no evidence of pylorospasm either grossly or from microscopic sections taken to include the pyloric valve. In relation to the emaciation there was moderate fatty change in the liver of large vacuolar type.

Our final pathologic diagnosis was:

Bronchopneumonia, bilateral, necrotizing, suppurative—with at least an element of aspiration—and empyema, bilateral, fibrinopurulent, early

Septic splenitis

Parenchymatous degeneration of heart, kidneys and liver and with fatty change 1.v.) moderate, of the latter

Atrophy and interstitial fibrosis of pancreas, moderate

Gastroenteritis, slight, apparently nonspecific

Emaciation, marked, with atrophy of thymus

It appears that the primary process here was extensive, severe bronchopneumonia. Microscopic sections revealed even more abscess than was evident grossly. The larger foci of induration and reddish discoloration described grossly were found to be areas of hemorrhage within large areas of bronchopneumonia. The cause of empyema was readily apparent upon viewing numerous sub-pleural abscesses. This type of pneumonia is ordinarily caused by staphylococcus aureus, an organism which is particularly virulent for infants and small children and one very prone to produce just the type of necrotizing suppurative process which was observed in this case. As a result of this infection there was toxemia at least, possibly septicemia terminally, leading to septic splenitis and parenchymatous degenerative changes in the heart, liver and kidneys. All of these processes interfered with metabolism and with the mobility and mechanical function of the gastrointestinal tract leading to vomiting and diarrhea with resulting dehydration, electrolyte imbalance and emaciation. The more dehydrated and emaciated the child became the lower its resistance until finally, shortly before death some of the abscesses extended into the pleural cavity to produce empyema.

The pneumonic process might have been arrested by more effective antibotic therapy, although I suspect that a great deal of damage had occurred in the lung by the time the child was first seen in the hospital. However, with really effective antibiotic therapy and the effective management of fluid and electrolyte balance possible today, aided by such measurements of electrolyte balance as Doctor Conrad is able to do with the flame photometer, the case might have turned out differently. I would like to hear your views on this, Doctor Strenge, and also your comments on parenteral diarrhea, particularly in relation to such a pneumonic process as I have described.

DR. STRENGE: In the first place, I would like to ask a question; what did the sections of the pancreas show?

DR. HOPPS: There was a moderate degree of atrophy and interlobular septae were broadened somewhat. There was no dilatation of ducts or acini and the total amount of pancreas seemed to be quite adequate. I don't know whether or not these changes can be explained entirely on the basis of emaciation and infection, they did not seem to

warrant a diagnosis of even slight or incipient fibrocystic disease.

DR. STRENGE: This would be a very acute course for fibrocystic disease of the pancreas, but that is one of the best backgrounds for severe staphylococcal pneumonia in a baby. Now, regarding your question, I think you have given the answer. If this had been a specific bacterial dysentery, you would probably have found extensive inflammatory changes in the intestine, possibly with pseudomembrane formation. The absence of blood in the stool led me away from that diagnosis clinically. We do occasionally see bacterial dysentery without blood in the stool and we do see extensive neurological manifestations associated with certain types of bacetrial dysentery, but the pathological picture which you describe is adequate to exclude this.

From the findings at autopsy, I must conclude that this is an unusually severe case of parenteral diarrhea, associated with severe pneumonia. It is amazing that the symptoms of diarrhea and vomiting so far preceded cyanosis and other respiratory symptoms, assuming that this started off as a pneumonia.

GENERAL DISCUSSION

QUESTION: Isn't it unusual for pneumonia to exist for several days without any clinical evidence of such?

DR. STRENGE: Ordinarily, with a primary pneumonia, symptoms directly related to the respiratory infection, fever, cough, etc., precede diarrhea rather than following it by four or five days. This case is unusual in that respect. Another unusual aspect is the history of no respiratory infection during the baby's life. This case is an example of one of the differences between bacterial infection in infants and adults. Here, the infectious agent apparently hit the lungs first without the upper respiratory infection that usually precedes pneumonia in older children and adults. As to the neurological manifestations, I still am not willing to accept hypocalcemia as a cause. I would still suspect some intracranial disease and regret that an examination of the brain was not allowed.

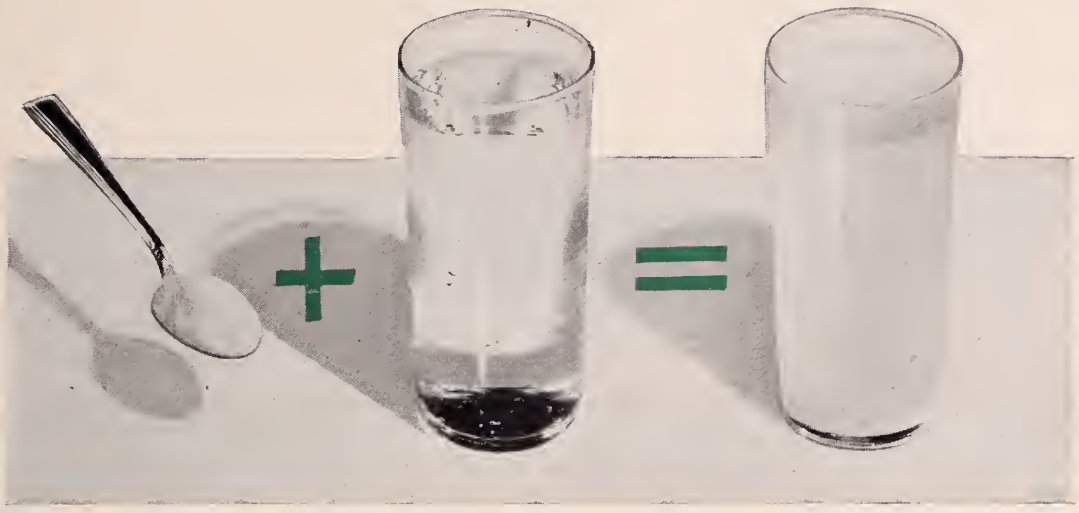
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I invite you to discuss frankly with me any questions regarding my services or my fees.
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FOR BOWEL REGULATION



Typically, the constipated stool is dehydrated, whereas the diarrheal stool or that induced by salines and irritants is hyperhydrated, containing free water.

When Metamucil is employed for the management of constipation, it is mixed in a full glass of cool liquid. The ingested liquid containing the mucilloid promotes normohydration.

METAMUCIL® is the highly refined mucilloid of Plantago ovata (50%), a seed of the psyllium group, combined with dextrose (50%) as a dispersing agent. G. D. Searle & Co., Chicago 80, Illinois.

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SEARLE RESEARCH IN THE SERVICE OF MEDICINE

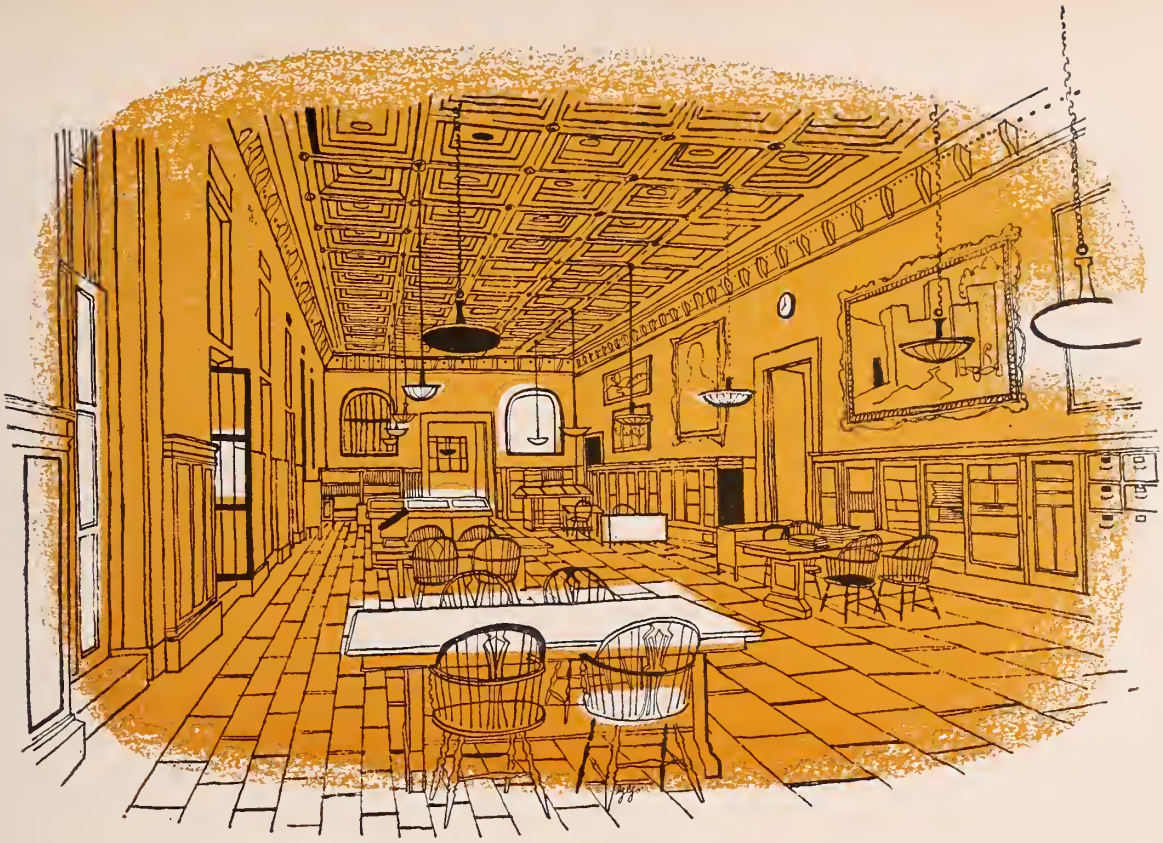
President's Page

Would you like an experience that renews your faith in the essential goodness of people and of the depth of their genuine love and appreciation for some of their doctors? Then let me urge you to attend one or more of the public meetings held to honor a medical practitioner who has cared for the people of a community for many years. The occasion usually marks the attainment of 50 years of practice. At the last such meeting we attended there were very few dry eyes in the hall at the conclusion of the ceremonies and not one of the speeches made sounded like an obituary either.

There have been complaints of commercialism among doctors and complaints that medical students are instructed in the science of medicine but not in the intangible things that make the practice of medicine a career of service to those who come to the doctor in their hour of need. I wish that every medical student and everyone who has been a medical student could attend such a meeting. Many of us would attain a different and a better conception of the true values in the practice of medicine.

L. O. McHenry

President



From among all antibiotics, Internists often choose

AUREOMYCIN

Hydrochloride Crystalline

because

Aureomycin readily passes into the blood stream, whence it diffuses rapidly into all the tissues and fluids of the body.

Aureomycin is a broad spectrum antibiotic that has been shown to be effective in a wide variety of infections of bacterial, rickettsial and large viral origin.

Aureomycin has been reported to be effective in

Acute Amebiasis	Hepatic and Biliary Tract Infections*	Respiratory Infections*
Anthrax	Influenza	Rickettsialpox
Acute Brucellosis	Leptospirosis	Septicemia*
Chancroid	Lymphogranuloma Inguinale	Rocky Mountain Spotted Fever
Shigella Dysentery	Pericarditis*	Boutonneuse Fever
Endocarditis*	Psittacosis	Tick-Bite Fever
Erysipelas	Q Fever	Typhus
Granuloma Inguinale	Rat-Bite Fever	Tick Typhus
	Relapsing Fever	Tularemia

*When caused by Aureomycin susceptible organisms.

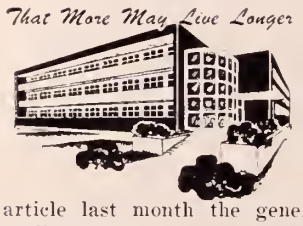
Throughout the world as in the United States, aureomycin is recognized as a broad spectrum antibiotic of established effectiveness.

Capsules: 50 mg.—Bottles of 25 and 100. 250 mg.—Bottles of 16 and 100.
Ophthalmic: Vials of 25 mg. with dropper; solution prepared by adding 5 cc. of distilled water.

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CURRENT ACTIVITIES AT THE OKLAHOMA MEDICAL RESEARCH FOUNDATION

EDWARD C. REIFENSTEIN, JR., M.D.
DIRECTOR



This is the third of a series of monthly articles designed to acquaint you with the activities at the Oklahoma Medical Research Foundation. In the first, a description was given of the physical plant, and in the article last month the general operational plans were outlined. The current presentation will describe the background and the general activities of some of the major scientific personnel of the Research Institute and Hospital. (See Figure 1.)

As has been pointed out in the second article in this series, the Board of Directors of the Oklahoma Medical Research Foundation made a decision to develop the facilities of the Research Institute and the Research Hospital as a single investigative unit with its primary emphasis on clinical research. It became apparent at once that it was essential to assemble an outstanding group of investigators with understanding, training, and experience in the special problems of clinical investigation. With a nucleus of such individuals as leaders, additional personnel could be recruited and trained to assist in the program, and all of the many other professionally-trained persons in the Medical Center and throughout the State could be integrated with the program so that their special skills could be employed at greatest advantage to facilitate the research endeavor. Such a group of investigators has been assembled, and will be introduced to you in the paragraphs that follow.

DR. MAX N. HUFFMAN

The first senior research investigator to be employed by the Foundation was Dr. Max N. Huffman who had been for several years Research Professor of Biochemistry at Southwestern Medical College in Dallas, Texas. Doctor Huffman is a nationally recognized organic chemist who has been synthesizing various agents of possible therapeutic value in disease conditions.

Doctor Huffman was born in Missouri. He graduated from the University of Missouri, and received a Ph.D. degree from St. Louis University. Doctor Huffman trained under Professor Edward A. Doisy who several years ago received the Nobel prize in medicine. Doctor Huffman was part of the original team which isolated the first crystalline estradiol. Dr. Huffman also served as a National Research Council Fellow in Medical Sciences at the College of Physicians and Surgeons of Columbia University, in New York City. Following this he was Director of Research for a pharmaceutical organization, the U. S. Standard Products Company in Wisconsin, and then spent five years at Southwestern Medical College. He is a member of a number of national professional societies and he has published over 30 scientific papers. Dr. Huffman began his work at the Foundation in July, 1950. He is Head of the Section on Organic Chemistry, and will continue to do research in the fields of cancer, rheumatoid arthritis, tuberculosis, and endocrinology. Doctor Huffman has an appointment as Professor of Research Biochemistry at the University of Oklahoma School of Medicine.

DR. EDWARD C. REIFENSTEIN, JR.

The next man to be named was Dr. Edward C. Reifenstein, Jr., the Director of the Research Institute and Hospital. Doctor Reifenstein is internationally known as an authority on medical diseases of bone and one endocrine disorders. Doctor Reinfenstein was born in Syracuse, New York. His father was Professor of Medicine at Syracuse University, and his uncle and two younger brothers are physicians. Doctor Reifenstein received his A.B. degree from Syracuse University, and his M.D. degree from Syracuse University College of Medicine. He obtained his hospital training in Syracuse. Doctor Reifenstein was associated for six years with Doctor Fuller Albright, at the Massachusetts General Hospital in Boston, doing advanced research in endocrinology and metabolic bone disorders. In 1946, Doctor Reifenstein went to New York City as a Consultant and later as a Research Associate at the Sloan-Kettering Institute, where he conducted investigations on the endocrine aspects of cancer. At the same time he served as a Consultant, and later as Executive Director of the Medical and Research Division of Ayerst, McKenna and Harrison, Limited, a pharmaceutical manufacturing organization.

Doctor Reifenstein is a member of the Committee on Therapeutic Nutrition, Food and Nutrition Board, of the National Research Council; a member of the Committee on the Diagnosis and Therapy of Cancer, Division of Medical Sciences, of the National Research Council; and a member of the Metabolism and Nutrition Study Section of the National Institute of Health. In addition to belonging to a number of other national organizations, he is a member of the American Society for Clinical Investigation, a Fellow of the American College of Physicians and a Fellow of the New York Academy of Medicine. Doctor Reifenstein is a co-author with Doctor Albright of a book on metabolic bone disorders and the author of about 80 scientific papers. In addition to serving as Director of Research for the Oklahoma Medical Research Institute and Hospital, Doctor Reifenstein is Head of the Section on Endocrinology and Metabolism. He is particularly interested in metabolic bone diseases and will conduct a program of investigation on this subject. He arrived at the Foundation to begin his duties in November, 1950. Doctor Reifenstein has an appointment as Professor of Research Medicine at the University of Oklahoma School of Medicine.

DR. CHARLES D. KOCHAKIAN

Additional appointments to the Staff of the Oklahoma Medical Research Institute and Hospital have followed in rapid succession. Doctor Charles D. Kochakian, who was formerly Associate Professor of Physiology of the School of Medicine and Dentistry of Rochester, New York, was appointed as Associate Director of the Institute and Hospital and joined the Staff in January, 1951. Doctor Kochakian is an endocrine physiologist and physiological chemist who is internationally known for his work on hormones, enzymes, nutrition and growth. He has served as a member of the Panel on Hormones, of the Committee on Growth, of the National Research Council. He is also a member of the Panel of Appraisers of the Handbook on Biological Data of the American Institute of Biological Sciences. He was awarded the Claude Bernard Medal and appointed a visiting Claude Bernard Professor of the Institute of Experimental Medicine and Surgery of the University of Montreal on April 27 and 28, 1950. He is also an Associate of the Roscoe B. Jackson Memorial Laboratory, Bar Harbor, Maine. He was the principal guest at a Conference on Steriod Hormones and Enzymes given by the Ciba Foundation in London, England, March 8 and 10, 1950. In addition Doctor Kochakian is the author of over 70 scientific papers.

Doctor Kochakian was born in Haverhill, Mass. He received his A.B. and A.M. degree in organic chemistry

from Boston University, and received his Ph.D. in physiological chemistry from the University of Rochester, Rochester, New York. He is a member of a number of national societies. He will continue his research on hormones and growth in Oklahoma. In addition, he is in charge of a Central Research Laboratory which is being developed in the Institute and supervises the facilities for animal experimentation as well as the Graduate Training Program. Doctor Kochakian has an appointment as Professor of Research Biochemistry in the University of Oklahoma School of Medicine.

DR. R. PALMER HOWARD

Dr. R. Palmer Howard, formerly Demonstrator in Medicine at McGill University in Montreal, Canada, and in charge of the Endocrine Clinic and Laboratory of the Montreal General Hospital, joined the Staff in April, 1951, as a Member of the Section on Endocrinology and Metabolism working with Doctor Reifenstein. Doctor Howard is an endocrinologist and clinical investigator, who is known for his work on testicular disorders and on metabolic bone conditions. Doctor Howard was born in the United States in Iowa City, but spent most of his life in Montreal. He received an A.B., an M.D., a C.M., and an M.Sc. degree from McGill University, served in the Royal Canadian Army Medical Corps for five years, and then continued his medical training at Johns Hopkins Hospital in Baltimore, Md., at the Massachusetts General Hospital in Boston, Mass., and finally at McGill. Doctor Howard is a member of a number of medical societies, and is the author of 18 scientific publications. He will work with Doctor Reifenstein on metabolic bone disorders and do some additional investigation on problems of endocrinology. In addition, he will participate in the undergraduate and graduate training programs of the Oklahoma Medical Research Institute and Hospital. Doctor Howard has an appointment as Associate Professor of Research Medicine in the University of Oklahoma School of Medicine.

DR. LEONARD P. ELIEL

Dr. Leonard P. Eliel, formerly Associate of the Sloan-Kettering Institute of the Memorial Hospital Cancer Center in New York City, and Assistant Professor in the Department of Medicine of Cornell Medical College, joined the Staff in August, 1951, as the head of the Section on Clinical Oncology. Doctor Eliel is a clinical investigator who has developed a national reputation for his work on the effect of hormones on malignant disease and the balance of body fluids.

Doctor Eliel was born in Los Angeles, California. He received his Medical Degree from Harvard Medical School, and had hospital training in Boston. For an interval Doctor Eliel was employed by the Pan American Airways, first as a Medical Officer in charge of laboratory and patient care, at the Base Hospital, in Accra, Gold Coast, Africa, and later as a Medical Officer in charge of flight crews from the New York area. During this period, Doctor Eliel's work included research on air sickness, a project done under a contract for the Naval Air Transport Command. Later, Doctor Eliel served actively in the United States Navy, and during this time did research on new anti-malarial and anti-filarial drugs. Doctor Eliel is a member of a number of Scientific organizations. He has published about two dozen scientific articles. Doctor Eliel will be in charge of clinical research in the field of cancer. In particular he will be studying the metabolic alterations that occur in patients with malignant disease and the changes that can be induced in such individuals by various agents which have an effect on normal or abnormal growth. He will participate in the undergraduate and graduate training programs of the Oklahoma Medical Research Institute and Hospital. In addition, Doctor Eliel has an appointment as Associate Professor of Research Medicine of the University of Oklahoma School of Medicine.



FIGURE 1. *Scientific Staff Section Heads of Oklahoma Research and Hospital.* Seated, left to right: Miss Shirley L. Wells, Director of Dietetics of Research Hospital; Dr. Edward C. Reifenstein, Jr., Director of Research Institute and Hospital, and Head of Section on endocrinology and Metabolism; Dr. Charles D. Kochakain, Associate Director of Research Institute and Hospital, and Head of Section on Biochemistry; and Miss Marian MacAulay, Director of Nursing of Research Hospital.

Standing, left to right: Dr. Leonard P. Eliel, Head of Section on Clinical Oncology; Dr. Robert H. Furman, Head of Section on Cardiology; Dr. Max N. Huffman, Head of Section on Organic Chemistry; and Dr. R. Palmer Howard, Member of Section on Endocrinology and Metabolism.

MISS MARIAN MACAULAY

The next person to join the Staff of the Oklahoma Medical Research Institute and Hospital was Miss Marian MacAulay, R.N., formerly Head Nurse of the Research Ward (Ward 4) at the Massachusetts General Hospital, Boston. She was appointed as a Member of the Staff of the Oklahoma Medical Research Institute and Director of Nursing of the Oklahoma Medical Research Hospital.

Miss MacAulay has been in charge of nursing on the Metabolic Research Ward of the Massachusetts General Hospital for the past nine years. She was born in Clinton, Massachusetts, but was educated in Canada. She graduated from the Charlottetown Hospital Training School at Prince Edward Island and since that time has worked in the Massachusetts General Hospital in Boston. She will participate in the planning of the clinical research program which is being evolved at the Research Hospital. She will be in charge of the undergraduate and graduate training programs for nurses at the Research Hospital. She joined the Staff of the Institute in August, 1951. In addition, Miss MacAulay has an appointment as Research Associate in the University of Oklahoma School of Nursing.

MISS SHIRLEY L. WELLS

Miss Shirley L. Wells, M.S., formerly Research Dietitian at the Massachusetts General Hospital in Boston, Massachusetts, also became a Member of the Staff of the Oklahoma Medical Research Institute in August, 1951. In addition, she was appointed Director of Dietetics of the Oklahoma Medical Research Hospital.

Miss Wells has been in charge of Dietetics on the Research Ward (Ward 4) of the Massachusetts General Hospital, Boston, for 15 years. She was born in Marshalltown, Iowa; and received a Bachelor of Science degree in Home Economics from Iowa State College, and a Master of Science degree in Home Economics from the State



FIGURE 2. *Administrative Staff of the Oklahoma Medical Research Foundation and Scientific Staff of the Oklahoma Medical Research Institute and Hospital in October, 1951.*

First row—Left to right: Hugh G. Payne, General Manager of Foundation; Gene White, Administrative Assistant to the General Manager; Alta Miller, Administrative Clerk; Martha Schreiber, Secretary; Dr. Max N. Huffman, Research Member; Bernice Katz, Research Assistant; Marian MacAulay, Director of Nursing; Mary Lott, Research Assistant; Dr. Charles D. Kochakian, Associate Director of Research; Josephine Hawrylko, Research Assistant; Dr. Edward C. Reifenstein, Jr., Director of Research Institute and Hospital; Dr. Alan J. Stanley, Research Associate; Shirley Wells, Director of Dietetics; Anita Eisheid, Reseach Assistant; Dr. Leonard P. Eliel, Research Member; Dr. R. Palmer Howard, Research Member; Hugh Schriver, Assistant Engineer; Lee Cramer, Chief Engineer.

Second row—Left to right: O. C. Estes, comptroller; Wilma Rust, Administrative Clerk; Shallon Reed, Receptionist; Luna Craver, Administrative Assistant; Dr. Dale Clark, Research Associate; Dan Nall, Research Assistant; Dr. Thomas C. Smith, Post-Doctorate Fellow; Clydelle Brownfield, Research Administrative Assistant; Richard Grundy, Laboratory Assistant; Ida Gist, Research Librarian; Leona Stansberry, Clerical Assistant; Raymodeen Wilkins, Research Administrative Assistant; Barbara Reed, Technician; Ruby Stephenson, Secretary; Clara Shetlar, Research Assistant; Leo Cawley, Laboratory Assistant; Dwight Smith, Laboratory Assistant; Virginia Richmond, Research Assistant; Dr. R. M. Shetlar, Research Associate; Jane Ann Bullock, Research Assistant; Cornelius Easley, Animal Caretaker; Alice Johnson, Maid.

University of Iowa. Thereafter, she worked as special dietitian in charge of research at the Massachusetts General Hospital. All the detailed metabolic studies conducted at this research ward for a period of 15 years were under her supervision. Miss Wells will participate in the planning of the clinical research program, and will be in charge of the undergraduate and graduate training programs for Dietetians at the Research Hospital. In addition, Miss Wells has an appointment as Associate Professor of Research Nutrition in the University of Oklahoma School of Medicine.

DR. ROBERT H. FURMAN

The latest addition is Dr. Robert H. Furman, who has been Assistant Professor of Medicine at Vanderbilt University School of Medicine, Nashville, Tenn. Doctor Furmau will be a Member of the Staff of the Research Institute and Head of the Section on Cardiology. Doctor Furman is highly respected in Nashville and in national circles because of his progressive research activities in the field of cardiovascular diseases.

Doctor Furman was born in Schenectady, New York. He received his undergraduate training at Union College in Schenectady and his medical training from Yale University School of Medicine. Part of his hospital training was obtained at New Haven and the remainder at Vanderbilt University School of Medicine. Since that time he has been on the Staff of Vanderbilt School of Medicine except for a period when he served in the United States Navy. Doctor Furman has been an Eli Lilly Fellow in Medicine, and later a National Research Council Fellow in the Medical Sciences at Vanderbilt. He is a member of a number of national medical societies and has published a series of 12 papers. Doctor Furman will be in charge of clinical research in the fields of cardiovascular and renal disorders. He will study the metabolic alterations that occur in patients with pulmonary, cardiac, hepatic, and renal conditions particularly from the vascular point of view, and will initiate a program involving an investigation of fat metabolism as related to atherosclerosis. He will assist in the undergraduate and gradute training program of the Oklahoma Medical Research Institute and Hospital. Doctor Furman, in addition, will have an appointment as Associate Professor of Research Medicine in the University of Oklahoma School of Medicine.

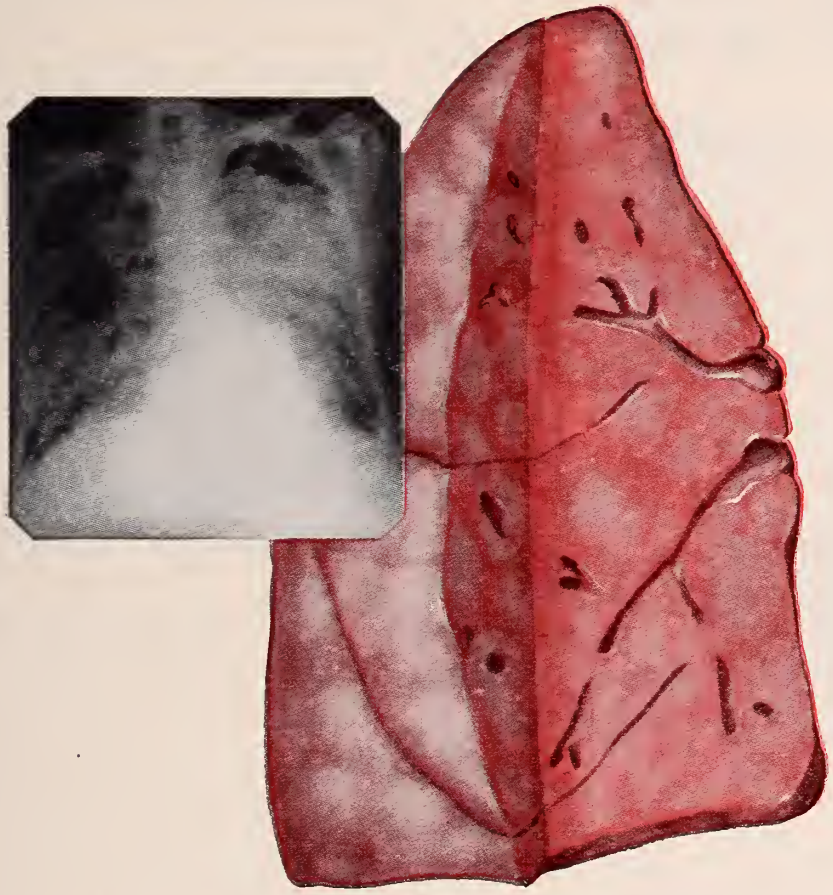
A large number of other persons will play important roles in the conduct of the research program as associates of the individuals who have been described in this article. A group picture of the Administrative Staff and Scientific Personnel as of October, 1951, is shown in Figure 2. The whole-hearted collaboration of a great many people is required to put into action the active program of the Oklahoma Medical Research Institute and Hospital.

SHOWMAN IS COUNCILOR

President L. Chester McHenry, M.D., has appointed W. A. Showman, M.D., Tulsa, to fill out the unexpired term of V. K. Allen, M.D., Councilor who died recently. Doctor Showman is president of the Tulsa County Medical Society.

ADVISORY HEALTH COUNCIL

Oklahoma Advisory Health Council met in Stillwater November 15. M. H. Newman, M.D., Shattuck, was named president-elect and Mrs. James F. McMurry, wife of Doctor McMurry of Sentinel, was re-elected secretary-treasurer.



in bronchopneumonia:

Clinical responses in bronchopneumonia, Terramycin-treated, are characterized by the same promptness noted in primary atypical and lobar pneumonia. In a series of 31 cases there was "a good response in all cases, as manifested by the fall of temperature to normal in 24 to 48 hours, and by the improved clinical appearance of the patient." Follow-up x-rays made in 10 to 14 days "were completely negative or showed marked improvement."

Potterfield, T. G., and Starkweather, G.A.: J. Philadelphia General Hosp. 2:6 (Jan.) 1951.

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Many doctors are prescribing "Daricraft Homogenized Evaporated Milk". It is always uniform, safe, sterilized, easy to digest, and high in food value and minerals. Daricraft contains 400 U. S. P. units of Vitamin D per pint.



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BOOK REVIEWS

SURGICAL PRACTICE OF THE LAHEY CLINIC. Members of the Staff of the Lahey Clinic, Boston, Massachusetts. 2nd Edition. W. B. Saunders Company, Philadelphia-London, 1951.

This second volume, published almost 10 years ago after the first volume, principally consists of a collection of papers published by Staff members of the Lahey Clinic, who have had extensive experience with the procedures involved. It is difficult to review the entire volume in a short essay because of the wide variety of topics by so many contributors. In the preface, Dr. Frank Lahey states that the purpose of the book is an attempt to help other surgeons gain knowledge of the procedures which have been standardized at the Lahey Clinic over a period of years. This initial aim has been fulfilled. Included are sections of the Thyroid Gland and Neck, Stomach and Duodenum, Small Intestine, Colon, Sigmoid and Rectum, Biliary Tract, Spleen, Adrenal Gland and Pancreas, Breast, Pelvis, Bones and Joints, Brain, Spinal Cord, Nerves, and Anesthesia; the final section deals with miscellaneous subjects. It would be difficult to select any one section as more thoroughly presented than another, but one could scarcely find, anywhere, an equal to the section on the Thyroid Gland and Neck, and the section on the Biliary Tract deserves special consideration by the general surgeon. An endeavor has been made to include in each section a review of surgical anatomy and a discussion of pertinent pathological, physiological, and clinical aspects of the subject. The general principles of operative surgery are discussed in an interesting manuer, and the technical steps of each operative procedure are well discussed and are illustrated by fine line drawings. A remarkable quantity of original observations have been compressed into the book; however, the various authors are not at all content merely to present data; they try, whenever possible, to develop a hypothesis on which to hang their observations. It is a very informative book for the general surgeon and a thought-producing one for the specialists in the various surgical fields. The student and surgeon will greatly aid and abet his efforts by reading this book carefully several times aud then referring to the pertinent section in connection with each case he encouuters.

The book consists of 1,014 pages and contains 784 illustratious on 509 figures. Each section contains many references, and there are two indices, one for subject matter, and one of the names cited throughout the book. The publishers are to be commended for this attractive editiou; the paper is good, the type clear, and the illustrations have been clearly reproduced — H. M. McClure, M.D.

COUNTY SUPERINTENDENTS OF HEALTH APPOINTED

According to the Oklahoma State Department of Health, the following physicians have recently been appointed county superintendents of health:

D. H. Cramblet, M.D., Haskell County, Stigler; J. H. White, M.D., Carter County, Ardmore; Forest R. Brown, M.D., Seminole County, Wewoka; W. C. McCurdy, Jr., McClain County, Purcell; A. M. Brown, M.D., Noble County, Perry; and Cody Ray, M.D., Osage County, Pawhuska.

HAVE YOU HEARD?

C. F. Paramore, M.D., and *Mrs. Paramore,* Shawnee, have returned from a three weeks tour of Europe. In addition to visiting friends in England, they also visited their son, Robert, who is stationed in Germany with the 12th Air Group. He was granted a leave and flew to London for a week's visit with his parents.

Curt Von Wedel, M.D., Oklahoma City physician and big game hunter, recently showed films and lectured on his African hunt at a program sponsored by the Newcastle Better Neighborhood club.

W. A. Heflin, M.D. has opened his office in Ryan.

Fred Merrifield, M.D., formerly of Taloga, has recently moved to Mooreland.

E. L. Collins, M.D., Panama, was recently featured in the "Know Your Neighbor" column in the LeFlore County Sun, Poteau.

A. W. Hoyt, M.D., Chickasha, atteuded the national conference of physicians and schools in Chicago in November.

A. M. Mixon, M.D., Talihina, was recently presented a 50 year service pin by the Spiro Lions Club.

A. L. Dougan, M.D., Carmen, was featured on a national broadcast aired on the Mutual Broadcasting company "Tell Your Neighbor" program.

Edwin Fair, M.D., Oklahoma City, spoke on "Accent on Youth" when he addressed the Oklahoma City Lions club recently.

William Bernell, M.D., Hobart, attended a two weeks postgraduate course in surgery in Chicago recently.

Several Oklahoma City physicians were speakers at the 44th Annual Meeting of the Frisco System Medical association. They were: P. M. McNeil, M.D.; George H. Kimball, M.D.,; W. W. Rucks, Jr., M.D.; Dick M. Huff, M.D.; and C. R. Rountree, M.D.

LeMon Clark, M.D., Oklahoma City, discussed "Marital Adjustments" at Oklahoma College for Women recently.

Kirk Mosley, M.D., Oklahoma City, was guest speaker recently at the Oklahoma County Council of P-TA's. He spoke on "Preparation for Good Health for Good Living."

S. P. Ross, M.D., formerly of Ada and now of Oklahoma City, recently celebrated his 89th birthday.

George M. Rahhal, M.D., and *Mrs. Rahhal,* Atoka, announce the birth of Robert Ray Rahhal, November 24, 1951, weight six pounds, 12 and one-fourth ounces.

C. P. Bondurant, M.D., Oklahoma City, has been named chairman of the Oklahoma public welfare commission to serve a nine year term.

Paul B. Rice, M.D., Oklahoma City, recently attended postgraduate courses at the Cook County Graduate School of Medicine, Chicago.

J. C. Metheney, EENT specialist at Okmulgee for 29 years, has announced his retirement from the practice of medicine and reports that all unpaid accounts have been cancelled.

POST GRADUATE GROUP MEETS

Members of the Postgraduate Committee of the Association met iu the Executive Offices iu Oklahoma City November 29 to discuss postgraduate education for the coming year. The committee is working closely with the post graduate division of the University of Oklahoma School of Medicine and it is contemplated that a series of postgraduate programs will be held in the spring and fall of 1952.

POSTGRADUATE COURSES

in

RADIOLOGY — 3 days, February 25-27.

ELECTROCARDIOGRAPHY — 6 days, March 10-15.

OPHTHALMOLOGY & OTOLARYNGOLOGY — 5 days, March 17-21.

NURSING — 3 days, February 11-13.
A refresher course for both institutional and provide nurses, including industrial and public health nurses.

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Each of These Courses Will Be Presented By An Outstanding Group of Guest Instructors in Addition to Members of the University Faculty.

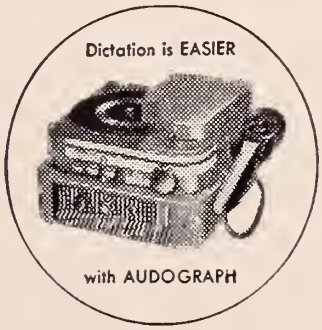
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TRIO OF EARLY DAY PHYSICIANS SWELL 50 YEAR CLUB RANKS

Three more Oklahoma physicians who began the practice of medicine in the horse and buggy days have received 50 year pins. T. H. Flesher, M.D., Edmond, received his pin at the Doctor Flesher Day staged by that city while Benjamin W. Ralston, M.D., Commerce, and J. W. Craig, M.D., Miami, were awarded their pins at a meeting of the Ottawa-Craig county medical society.

"Doctor Flesher Day" began with a parade through the downtown district of Edmond, a basket lunch and a program in the school auditorium. W. W. Rucks, M.D., Oklahoma City, long time friend of Doctor Flesher; and O.S.M.A. President L. Chester McHenry, M.D., were both on hand at the presentation of Doctor Flesher's 50 Year Pin.

Doctor Flesher was born in Reedsville, Ohio, but moved to Wayne County, Iowa, at an early age. In 1901, he was graduated from the Keokuk, Iowa, Medical college, now a part of the medical school of the University of Iowa. He is a past president of the Oklahoma County Medical Society. A captain in the medical corps in World War I, he was the first commander of the Frank Collins post 11, American Legion at Edmond. He is a member of the board of the First Methodist church, a past master of the Edmond Masonic lodge 37, a member of the Oklahoma Consistory No. 1 and the Sons of the Revolution, and a charter member of the Edmond Kiwanis club.

Doctor McHenry also made the 50 Year Pin presentations to Doctors Ralston and Craig, who also received O.S.M.A. life membership certificates.

Doctor Craig located in his home town of Shelby, Mo., when he began practice after graduating from the Missouri medical college, St. Louis, March 31, 1891. In the summer of 1900 he moved to Brookfield, Mo., and remained there for two years, when he moved to Vinita, Indian Territory. He remained in Vinita until 1925, when he moved to Miami. Doctor Craig served for several years as secretary of the Ottawa County Medical Society.

Doctor Ralston is a native of West Middleton, Pa., but took his early schooling in Nebraska. He was graduated from the University of Kansas School of Medicine in 1900 and interned at St. Joseph's hospital, Kansas City, Mo., before he came to Chickasha, Oklahoma Territory, in 1901, to establish his practice. En route, he was marooned by flood waters at Erin Springs, so he practiced there and later at Lindsay, until he moved to eastern Oklahoma more than 28 years ago. He still retains his Masonic affiliations at Okmulgee, where he was in practice approximately 18 months before moving to Miami and then to Commerce, where he practiced industrial medicine when the mines were at their busiest.

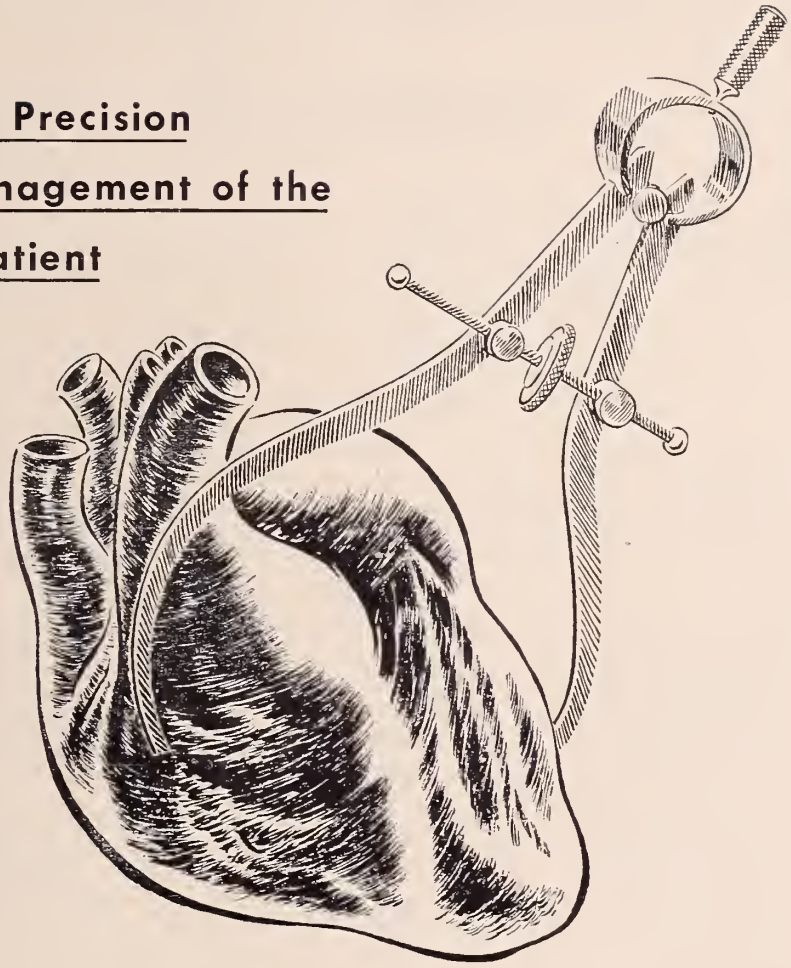


Top photo, Doctor and Mrs. Flesher view the TV set given to Doctor Flesher in appreciation of his services to the people of Edmond. Lower photo, Mayor John Kessler presents keys to the new automobile, also a gift to Doctor Flesher.



L. Chester McHenry, M. D., O.S.M.A. President (extreme right) is shown presenting 50 Year Pins to J. C. Matheney, M.D., Benjamin W. Ralston, M.D., and J. W. Craig, M.D.

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PHYSICIANS-PHARMACISTS URGED TO READ SUMMARY OF NEW DURHAM-HUMPHREY BILL

Physicians and pharmacists should acquaint themselves with the provisions of the Durham-Humphrey bill enacted by the 81st Congress and pertaining to prescriptions.

The bill, having the joint sponsorship and backing of the American Medical Association, the American Pharmaceutical Association and the American Association of Retail Druggists, has been designed to clarify and strengthen the law previously governing this field.

The provisions of the act are now in effect and all prescriptions coming under the provisions of the law must be handled as outlined in the following digest of the bill:

THE NEW PRESCRIPTION REFILL LAW (Durham-Humphrey) A SUMMARY OF ITS PROVISIONS

1. Household remedy prescriptions (for preparations without the RX legend) may be refilled ad lib and *without approval* of prescriber, but with usual care of dispenser.
2. Oral prescriptions may be filled upon the oral order of the practitioner or his expressly authorized representative, provided the pharmacist promptly makes a record of the oral prescription. This applies to all types of prescriptions, except narcotics, which cannot be refilled and must be in writing.
3. Oral and written prescriptions for habit-forming drugs (except nacotics) RX legend drugs, and all dangerous drugs *may be refilled* if authority to do so is given on the prescription or orally by the prescriber or his expressly authorized representative and such oral refill must be promptly recorded by the pharmacist.

 All oral prescriptions and oral refills must be recorded by the pharmacist at once and such record should be like, and in the form of, a written prescription with all the necessary information in the record, such as date; doctor's name and address; the preparation sought ; the dosage; directions for use and any cautionary statement given by the prescriber; and the patient's name if given by the prescriber. This prescription or refill record must be in such form that an inspector, upon examining it, may find all the information necessary, just as in the case of a written prescription.

 In the case of an oral refill, the record should preferably be made on the back of the original prescription, giving the date of authorization to refill; the person authorizing the refill; and any change requested by the prescriber either in dosage —in directions for use if any, or any other directions given by the prescriber or his expressly authorized representative. This is especially true in cases where the original prescription was marked "N.R." and the prescriber decides upon a refill of such a prescription or a variation of the original prescription.
4. Great responsibility is placed upon the pharmacist to make certain that the oral prescription or the oral refill of dangerous and habit forming drugs is issued by the physicians or his expressly authorized representative.

 This law was passed to protect the public health, as well as to eliminate, the prescription confusion. The Federal Drug Administrator will compel strict compliance with the law requiring authorization by the prescriber for oral prescriptions and oral refills. Especially in the case of habit forming drugs and other dangerous drugs, the pharmacist must make certain that the oral prescription or refill has been given by the prescriber or his expressly authorized representative.
5. All *habit-forming prescriptions* when refilled, must be labeled as follows:—
 (a) "Caution: May be habit forming," notice affixed.
 (b) The name and quantity or proportion of habit forming drug or its derivatives noted on label.
6. All *prescription drugs* must be labelled as follows:
 (a) Name and address of prescriber.
 (b) Serial number.
 (c) Directions for use and all cautionary statements noted as contained in the prescription.
 (d) Name of patient if given in prescription.
 (e) Name and address of druggist.
 (f) Date of prescription or its filling.
7. If original manufacturers' package of non-prescription drugs is broken and used in part by pharmacists, the use of the directions and all cautionary statements by the pharmacist, as it was contained on the original package, exempts pharmacists from liability for misbranding, if he acts in good faith.
8. The RX legend must be uniform on all prescriptions as follows:—"Caution: Federal law prohibits dispensing without prescription." However, any manufacturer who distributes a non-dangerous or non-prescription drug and affixes the RX legend to it, is guilty of misbranding.

 D-H law becomes fully effective April 26, 1952, but pharmacists can start *Immediately* to use the two pluses which the law gave them: (1) Fill oral (telephoned) prescriptions. (2) Refill non-Rx drugs without MD authorization.

COOPERATE WITH YOUR PHARMACIST

Appearing elsewhere on this page is a digest of the Durham-Humphrey bill passed by the 81st Congress and dealing with the new federal law concerning the writing and re-filling of prescriptions. Physicians must realize their obligations to the pharmacists, particularly when it is realized that in some instances pharmacists are being asked by physicians, perhaps unknowningly, to violate the law. The Durham-Humphreys bill was passed by Congress after endorsement by the American Medical Association.

Take time to visit with the pharmacist you use so that you may understand his problem and thereby be in a position to cooperate with him.

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BOARD OF MEDICAL EXAMINERS HOLDS FALL MEETING

The Oklahoma State Board of Medical Examiners met during the meeting of the Oklahoma City Clinical Society for the consideration of disciplinary measures against several physicians. Eighteen physicians appeared before the Board for one reason or another and the licenses of the following physicians were either revoked or suspended:

Frank George Beard, Tulsa—Application for Reinstatement of License—Denied.

Joseph Walter Beyer, Tulsa—License revoked.

Nevin J. Diffenbach, Tulsa—Not eligible to practice. No current renewal certificate of registration.

Oscar Alvin Flanagan, Tulsa—License suspended for five years.

Luther Mace Lile, Hope, Ark.—License revoked.

Thomas Lafayette Robinson, Ponca City — License revoked by personal request.

Fred Somerville Watson, Okmulgee—License suspended one year.

The following physicians have recently been licensed to practice medicine:

Robert John Meyer, Minneapolis, Minn.
Betty Jane Bamforth, Oklahoma City.
Francis Alston Davis, Shawnee.
Ausey Hamilton Robnett, Tulsa.
Richard J. Schneble, Ponca City.
Frederick C. Wallingford, Bartlesville.
Phil White, Oklahoma City.
Richard Wyrick, Oklahoma City.
Wm. Stevenson Jacobs, Tulsa.
J. R. B. Branch, Oklahoma City.
Neumon Darrell Johnson, Tulsa.
Harold Wade Kinderman, McAlester.
Harlan Thomas, Tulsa.
John Hubert Sturges, Santa Rosa, Calif.
Elvin Miller Brother, Oklahoma City.
Wm. Archibald Betts, Tulsa.
Lawrence L. Spitzer, Marlow.
Robert I. Bariekman, Jr., Tulsa.
Thomas David Burnett, Sapulpa.
Martin Leibovitz, Tulsa.
Paul C. Benton, Tulsa.
Robert Lee Currie, Sallisaw.
Merlin E. Jacobson, Oklahoma City.
Carl Kreiger, Jr., Oklahoma City.
Robert Leroy Ramsdell, Norman.
Julius Alfred LaCroix, Jr., Oklahoma City.
Nova Lemoine Morgan, Oklahoma City.
Alfred Max Schideler, Oklahoma City.
Woodrow Wilson Massad, Oklahoma City.
Billy Neil Gray, Oklahoma City.
Thomas Oran Hodges, Oklahoma City.
Howard Kenneth Ihrig, Oklahoma City.
Millcent Marrs Stream, Norman.
Theodore R. Wenger, Tecumseh.
Robert Alan Northrup, Tulsa.

The Journal will carry in its columns monthly actions by the Board concerning newly licensed physicians. Readers are reminded that the cities following the physicians' names are the ones in which they were residing at time of licensure.

CD CONFERENCES HELD

Upon the return of Allen Gibbs, M.D., and Milam F. McKinney, M.D., from the meeting in Chicago to study civilian defense, conferences were held with Mr. Glenn Poarch, newly appointed director of Civilian Defense for the State of Oklahoma. Purpose of the conferences was to begin planning for the development of the medical aspects of local civilian defense.

PRIORITY II MAY BE CALLED

Military Advisory Committee of the Association met Sunday, December 2, for the purpose of reviewing the availability of Oklahoma physicians who are members of the medical corps reserve of the army, navy and air forces, who may be called to duty shortly after January 1. It has been pointed out to this committee that unless there is a change in the Korean situation, Priority II physicians will probably be called sometime during 1952. The committee was also requested by Selective Service to review all deferred classifications that have been given doctors of medicine by local Selective Service boards.

STATE LEGISLATIVE COUNCIL CONSIDERS RECOMMENDATIONS

The state legislative council which considers all proposed legislation in the interim between meetings of the state legislature, discussed matters pertaining to public health and welfare at its meeting December 17.

Proposals coming before the committee included amendments to bring state laws concerning the control and use of narcotics by teenagers, also the feasibility of separating the mental health department from the Board of Affairs and the clarification and modernization of existing mental health laws.

STUDENT A. M. A. MEETS IN CHICAGO

Representatives of the University of Oklahoma School of Medicine attended the meeting of the Student American Medical Association held in Chicago December 27 and 28.

Playing a prominent part in the discussions of the Student A.M.A. was the internship matching plan which has received so much publicity in the field of hospital and medical school training programs. The University of Oklahoma chapter was prominent in the floor discussions with regard to the matching plan and took the position that this method of securing internships should be abolished.

CANCER SOCIETY MEETING

Physicians throughout the state are invited to attend the Annual Meeting of the Oklahoma Division of the American Cancer Society which will be held in the Skirvin Hotel, Oklahoma City, January 11 and 12. Members of the O.S.M.A. are especially cordially invited to the dinner session January 11.

PROMOTION SCHEME FAILS

Emphasizing "Before you donate, call the Better Business Bureau for Facts," Oklahoma City's BBB recently released the following:

Oklahoma City business men who received new $1.00 bills through the mail from the "Cancer Welfare Fund, Inc." will be interested to know that the promoters, Joseph L. Brandt and Sidney Greenberg, were sentenced to three and one-half and two and one-half years respectively for mail fraud. They mailed out a total of $17,000 in $1.00 bills, asking that they be returned with appropriate contributions. In 10 months the corporation collected $123,000.00, spent only $7,349.00 on cancer sufferers and owed $75,000.00 despite the sum collected.

OKLAHOMA REGION LABELED "CRITICAL DEFENSE AREA"

One part of Oklahoma, the Fort Sill, Lawton area (consisting of Comanche county) was one of the "critical defense areas" named by the President on November 7, 1951, as eligible for federal assistance in the construction and possible maintenance of defense housing and community facilities.

Community facilities are defined as "waterworks, sewers, sewage, garbage and refuse-disposal facilities, police and fire protection facilities, public sanitary facilities, hospitals and other places for the care of the sick, recreational facilities, streets and roads, and day-care centers."

In the case of construction of hospitals or other places for the care of the sick, application to the Hill-Burton funds must first be made and refused before assistance may be given under this law. The federal government may make loans or grants to public and nonprofit agencies if local communities are unable or unwilling to carry out their responsibilities. Under certain conditions, the federal government, through the surgeon general, public health service, might actually *operate* hospitals and other health facilities financed by federal funds.

4,000 PINTS OF BLOOD PER MONTH IS QUOTA

J. R. B. Branch, M.D., medical director of the Oklahoma Defense Blood Center, reports that if the response to the appeal for blood continues in the future as it has in the past few months, the quota of 4,000 pints per month can be reached. Doctor Branch gives the following history of the Oklahoma Defense Blood Center:

The Oklahoma Defense Blood Center was activated on October 22, 1951. At first, only one mobile unit was put into operation, and beginning on November 12, the second unit was put in the field. Visits have been made to Chickasha, Shawnee, Ada, Purcell, Holdenville, Pauls Valley, Verden, Guthrie, Duncan, Chandler, El Reno, Healdton, Ardmore, Norman, Okmulgee, Henryetta, and Stillwater, in addition to operations held in Oklahoma City and Tinker Field.

The response, both from the general public and the medical profession has been most gratifying, Doctor Branch reports. In October 770 pints of blood were shipped to Fort Worth for processing into plasma, and as of November 20, an additional 2,055 pints were shipped, giving a total to November 20 of 2,825 pints.

Letters have been written to the presidents of all county medical societies enlisting their support as follows: first, to approve and back the defense blood program; second, to interest wherever possible prospective donors allaying any possible apprehension and fears and stressing the urgency of the program; third, to provide medical coverage during the period of operation of the suit. From past experience, this cooperation seems definitely assured, according to Doctor Branch.

Beginning the first of the year, the new permanent center at 323 N. W. 10th will be open and used not only as a base of operation for the mobile units, but also as a center to receive donors who can be enlisted. The success of the program so far has been largely due to the recognition of the urgency of the need for blood for the Armed Forces, efficient organization through the field representative, Miss Marjorie Bunker, and the enthusiasm of the local Red Cross chapter volunteers, and the medical profession. Doctor Branch further praised the warm support given by the press, radio stations, and WKY-TV as being of inestimable value.

CLASSIFIED ADS

FOR SALE: 15 MA vertical fluoroscopy and x-ray combination; complete darkroom equipment; Birtcher FCC approved diathermy; Hamilton steel examining table; all nearly new. Write Key Z, care of the Journal.

FOR SALE: 14 bed hospital and clinic, southeastern part of state. County Seat town. Trade area 19 thousand. Write Key F, care of the Journal.

FOR SALE: 50 M.A. 96 KV heavy duty Aloe x-ray. Fluoroscope machine with table and synchronize traveling bucky. Complete with cassette, hangers and all darkroom equipment. In use three months. Warren Gibson, Phone 1003, Lindsey Memorial Hospital, Pauls Valley, Oklahoma.

WANTED. An assistant surgeon in industrial clinic. Qualifications and personality must be exceptionally satisfactory. Excellent opportunity for right party. Write Key J, care of the Journal.

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FOR SALE: Well established practice and well equipped office in Oklahoma City. Write Key D, care of the Journal.

FOR SALE: Large Cameron cautery; small cautery; small examining table, by widow of deceased physician. White Key S, care of the Journal.

ANNOUNCEMENTS

OKLAHOMA CITY OB.-GYN. SOCIETY meeting, January 19.

WASHINGTON'S BIRTHDAY CONFERENCE, Oklahoma City, February 22.

OKLAHOMA ACADEMY OF GENERAL PRACTICE, Tulsa Hotel, Tulsa, Oklahoma, March 17 and 18.

AMERICAN COLLEGE OF PHYSICIANS, Cleveland, Ohio, April 21-25.

OKLAHOMA STATE MEDICAL ASSOCIATION, Oklahoma City, Oklahoma, Municipal Auditorium, May 19-21.

CHICAGO MEDICAL SOCIETY CLINICAL CONFERENCE, Palmer House, Chicago, March 4, 5, 6, 7, 1952. Complete program will be mailed upon request. In response to popular demand, the 1952 program will show an increased number of demonstrations or workshop periods in addition to the regular series of lectures.

AMERICAN BOARD OF OBSTETRICS AND GYNECOLOGY announces the election of Dr. John L. Parks of Washington, D. C., as a member and Director of the Board. Doctor Parks succeeds Dr. Joseph L. Baer, who has been Vice President of the Board for over 20 years and who has resigned.

Applications must be received no later than January 2, 1952, for the competitive examination for appointment of medical officers to the regular corps of the United States Public Health Service. Examinations will be held at a number of points throughout the United States, February 5, 6, and 7, 1952.

OBITUARIES

VICTOR K. ALLEN, M.D.
1888-1951

V. K. Allen, M.D., past president of the Tulsa County Medical Society and Councilor from that district, died November 8 after an illness of only a few days.

Doctor Allen was born in Hope, Arkansas, and was graduated from Tulane university medical school. He later studied at St. John's medical school, London.

During World War I he spent two years in the medical corps, including several months in France. After returning from the service he began practice at Le-Compte, La.

Doctor Allen was a member of the American and Midwest Proctological societies, American College of Surgeons and American and International Board of Surgeons and the Southwestern Surgical Congress. He was also a 32nd degree Mason and a member of the Pilgrim Masonic lodge, Akdar Shrine, First Presbyterian church, American Legion and Veterans of Foreign Wars. He was a member of the Board of governors and on the staff of Hillcrest hospital. He was also a member of the chamber of commerce and formerly belonged to the Downtown Kiwanis club.

Surviving are the widow of the home, a daughter and two sisters.

GROVER C. MOORE, M.D.
1884-1951

Grover C. Moore, M.D., Ponca City resident for 22 years, died suddenly November 18.

Doctor Moore, whose specialty was eye, ear, nose and throat, was born September 17, 1884, at Hot Springs, Arkansas. He received his medical degree from the University of Arkansas School of Medicine in 1913. He served as flight surgeon during World War I and after the war, he studied for four years in New York. He then established his practice at Okmulgee and moved to Ponca City in 1929. He was active and in county and state medical societies and was also a member of the American Legion and Masonic lodge.

RAY HOLBROOK, M.D.
1870-1951

Ray Holbrook, M.D., pioneer Payne county physician, died at his home in Perkins November 17.

Doctor Holbrook was born in 1870 in Booneville, Ky. He studied in Lebanon, Ohio, and at Louisville University in Kentucky, and received his degree from St. Louis University. After graduation he started for California, stopped in Perkins, and never found time to finish his trip westward.

Doctor Holbrook was an honorary life member of the Perkins Masonic lodge, a 32nd degree Mason and was a member of the Indian Shrine at Oklahoma City.

Survivors include the widow of the home address, three sons and one daughter.

REPORT IS MADE ON HOME TOWN CARE PROGRAM

Figures recently released by the Veterans Administration show that out of 588 physicians participating in the Veterans Home Town Medical Care Program in the Oklahoma City region, 122 received payments for medical care rendered during October. Fees ranged from $3.00 to $652.50.

Payments made through the Muskogee Regional Offices showed that 149 physicians received fees from the VA in October with the lowest fee in that area $3.00 also. Highest fee in the Muskogee district was $457.00.

The agreement between the Oklahoma State Medical Association and the Veterans Administration for the home town medical care program was made four years ago with each member of the Association given an opportunity to participate.

ATTEND INTERIM SESSION

Attending the mid-winter session of the A.M.A. in Los Angeles in December were the following representatives of the O.S.M.A.: James Stevenson, M.D., Tulsa; John F. Burton, M.D., Oklahoma City; L. C. McHenry, M.D., Oklahoma City; John McDonald, M.D., Tulsa; John Records, M.D., Oklahoma City; and John K. Hart, Associate Executive Secretary, Oklahoma City.

One of the highlights of the meeting was the appearance Wednesday evening, December 5, at the open meeting of the House of Delegates, of Ohio Republican Senator Robert A. Taft and Virginia Democrat Harry Byrd, who discussed the major national issues for 1952. It was a public meeting and a capacity crowd of 6,800 people were present. The discussion was carried by the ABC network.

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PAYS.. A Monthly Indemnity for total disability during first year, whether house confined or not, ...From First Day	$ 300.	$ 200.	$ 100.
PAYS.. Total Monthly Indemnity First 2 Years...	5400.	3600.	1800.
ACCIDENT BENEFITS			
PAYS.. A Monthly Indemnity for total disability during first year From First Day	300.	200.	100.
PAYS.. Total Monthly Indemnity First 2 Years...	5400.	3600.	1800.
PAYS.. Monthly Indemnity for partial disability up to 13 weeks From First Day	120.	80.	40.

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	PLAN AA	PLAN A	PLAN B
Annual	$138.00	$92.00	$46.00
Semi-Annual	69.50	46.50	23.50

ADD $5.00 TO FIRST PREMIUM ONLY

OPTIONAL BENEFITS	PLAN AA	PLAN A	PLAN B
Monthly Hospital Indemnity may be added up to for $6.00 per $100 Hospital Benefits payable for One to 90 days — Each disability.	$ 450.	$ 300.	$ 150.
Accidental Death and Dismemberment Indemnity up to.. Added for $2.00 per $1000.	7500.	5000.	2500.

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AMA REPRESENTATIVE REPORTS ON SURVEY

Lawrence Rember, field director of the public relationstions department of the American Medical Association, addressed members of the Public Policy Committee of the O.S.M.A. when the group met November 27.

Mr. Rember reported on the results of the survey taken in Decatur, Macon County, Illinois, concerning the public's attitude with regard to its opinion of physicians, hospitals, drug costs, etc. Because this survey was the first of its kind, its results have been viewed with interest. It is believed that the profession will be interested in the questions asked and the replies given. The following represents the results, giving the questions asked and the answers by per cent:

1. Do you have a family doctor?
 - Yes 91 per cent
 - No 9 per cent
2. Have you or any member of your family seen your family doctor within the past year?
 - Yes 89 per cent
 - No 11 per cent
3. Have you ever used a specialist?
 - Yes 75 per cent
 - No 25 per cent
4. Was the specialist recommended by your family doctor?
 - Yes 39 per cent
 - No. 36 per cent
5. Are you able to get your doctor (or a doctor) when you want him, regardless of whether it is nights, week days, Saturday or Sunday, or a holiday?
 - Yes 80 per cent
 - No 7 per cent
 - Sometimes 3 per cent
 - Dont know 10 per cent
6. How soon does your doctor respond?
 - Right away 54 per cent
 - Short delay 25 per cent
 - Long delay 7 per cent
 - Don't know 14 per cent
7. For services rendered, do you think you pay too much, too little, or about the right amount for home calls?
 - Too much 10 per cent
 - Too little 1 per cent
 - About right 77 per cent
 - Don't know 12 per cent
8. For services rendered, do you think you pay too much, too little, or about the right amount for office calls?
 - Too much 11 per cent
 - Too little 0
 - About right 85 per cent
 - Don't know 4 per cent
9. For services rendered, do you think you pay too much, too little, or about the right amount for surgery?
 - Too much 16 per cent
 - Too little 0
 - About right 40 per cent
 - Don't know 44 per cent
10. For services rendered, do you think you pay too much, too little, or about the right amount for hospital care?
 - Too much 36 per cent
 - Too little 1 per cent
 - About right 48 per cent
 - Don't know 15 per cent
11. For services rendered, do you think you pay too much, too little, or about the right amount for prescription drugs?
 - Too much 33 per cent
 - Too little 0 per cent
 - About right 44 per cent
 - Don't know 23 per cent
12. What do you think of the quality of medical care (that is, other than surgical care) that you are receiving in your community?
 - Excellent 38 per cent
 - Good 53 per cent
 - Fair 9 per cent
 - Poor 0
13. What do you think of the quality of the surgical care that you are receiving in your community?
 - Excellent 35 per cent
 - Good 26 per cent
 - Fair 5 per cent
 - Poor 2 per cent
 - Don't know 32 per cent
14. What do you think of the quality of hospital care that you are receiving in your community?
 - Excellent 19 per cent
 - Good 44 per cent
 - Fair 17 per cent
 - Poor 7 per cent
 - Don't know 13 per cent
15. What do you think of the quality of the nursing care that you are receiving in your community?
 - Excellent 19 per cent
 - Good 45 per cent
 - Fair 18 per cent
 - Poor 4 per cent
 - Don't know 14 per cent
16. Do you go out of town at all for medical care? If so, where, for what, and why?
 - Yes 28 per cent
 - No 71 per cent
 - No answer 1 per cent
17. Are the employes in your doctor's office courteous, discourteous, or in between?
 - Courteous 93 per cent
 - Discourteous 1 per cent
 - In between 3 per cent
 - Don't know 3 per cent
18. Are you taken care of in a reasonable or an unreasonable time in your doctor's office?
 - Reasonable 77 per cent
 - Unreasonable 22 per cent
 - No answer 1 per cent
19. Do you feel that your own doctor has a personal interest in you?
 - Yes 91 per cent
 - No 7 per cent
 - Don't know 2 per cent
20. Do you feel that Decatur (or Macon county) doctors in general are interested, moderately interested, or not interested in their patients as individuals and as people?
 - Interested 59 per cent
 - Moderately 26 per cent
 - Not interested 6 per cent
 - Don't know 9 per cent
21. Do you have voluntary prepaid health insurance?
 - Yes 81 per cent
 - No 19 per cent

22. If you are not covered by voluntary prepaid health insurance, do you know about such plans?

Yes	18 per cent
No	1 per cent

23. Are you satisfied or dissatisfied with the prepaid health insurance that you have?

Satisfied	64 per cent
Dissatisfied	12 per cent
Don't know	5 per cent

24. Do you think Decatur (or Macon count) doctors are very interested, moderately interested, or not interested in making their community a better place to live?

Very interested	58 per cent
Moderately	18 per cent
Not interested	5 per cent
Don't know	19 per cent

25. Do you like doctors as people?

Yes	91 per cent
No	6 per cent
Don't know	3 per cent

26. Would you like to change doctors as people?

Yes	27 per cent
No	67 per cent
Don't know	6 per cent

27. What is your opinion of the Macon County Medical Society? Is it favorable, unfavorable, or don't you have an opinion on it?

Favorable	40 per cent
Mixed	1 per cent
Unfavorable	4 per cent
Don't know	55 per cent

28. Are you familiar with any of the public services, or community services of the Macon County Medical Society?

Yes	35 per cent
No	64 per cent
No answer	1 per cent
No	18 per cent

29. Have you ever heard of the American Medical Association?

Yes	82 per cent

30. Do you think favorably or unfavorably of the A.M.A.?

Favorably	42 per cent
Neutral	2 per cent
Unfavorably	8 per cent
Don't know	48 per cent

OKLAHOMA IS SECOND IN SMA REGISTRATIONS

With the exception of Texas, the host state, registration of Oklahoma physicians at the Southern Medical Association Dallas meeting November 5-8, 1951, exceeded that of any other state represented. Ninety-three Oklahoma physicians were in attendance. Total registration was approximately 3,356.

According to the Daily Bulletins of the 45th Annual Session of the Southern, the following Oklahomans were registered:

V. K. Allen, Tulsa; Roy W. Anderson, Cordell; C. E. Bates, Oklahoma City; C. M. Bloss, Jr., Holdenville; Walter E. Brown, Jr., Tulsa; Coyne H. Campbell, Oklahoma City; Wylie G. Chestnut, Miami; N. E. Cobb, Mooreland; Matt A. Connell, Picher; Wm. Henry Cook, Chickasha; Keiffer D. Davis, Bartlesville; W. A. Dean, Tulsa; E. F. Deese, Ada; Joe L. Duer, Woodward; Safety R. First, Tulsa; O. J. Gee, Oklahoma City; R. K. Goddard, Jr., Skiatook; John M. Gowdy, Talihina; Onis Hazel, Oklahoma City; G. M. Hogaboom, Heavener; Dick H. Huff, Oklahoma City; Hugh G. Jeter, Oklahoma City; C. A. Johnson, Ardmore; Henry Laurens, Ada; Ian MacKenzie, Tulsa; Elias Margo, Oklahoma City; Jack C. Mileham, Chandler;

John B. Miles, Anadarko; Donald L. Mishler, Tulsa; Edward L. Moore, Tulsa; G. C. Moore, Ponca City; L. J. Moorman, Oklahoma City; Ben H. Nicholson, Oklahoma City; S. L. Neuman, McAlester; Herbert S. Orr, Tulsa; Reynold Patzer, Oklahoma City; Carroll M. Pounders, Oklahoma City; John W. Records, Oklahoma City; E. Norris Robertson, Oklahoma City; Homer A. Ruprecht, Tulsa; G. R. Russell, Tulsa; Robert O. Ryan, Norman; George Warren Scott, Tishomingo; Winfred A. Showman, Tulsa; Elbert H. Shuller, McAlester; Carl F. Simpson, Tulsa; Franklin D. Sinclair, Tulsa; Marcella R. Steel, Tulsa; Averill Stowell, Tulsa; C. Riley Strong, El Reno; C. B. Sullivan, Carnegie; Joseph J. Swan, Chickasha; A. W. Truman, Ardmore;

Harry H. Turner, Oklahoma City; Arnold H. Ungerman, Tulsa; H. F. Vandever, Enid; J. H. Veazey, Ardmore; Jesse R. Waltrip, Pauls Valley; W. K. West, Oklahoma City; Chas. Ed. White, Muskogee; Fred Woodson, Tulsa; Frank L. Wormington, Miami; C. Jack Young, Oklahoma City.

Charles P. Bondurant, Oklahoma City; J. S. Chalmers, Sand Springs; Carl R. Doering, Norman; Hugh J. Evans, Tulsa; F. L. Flack, Tulsa; G. E. Johnson, Ardmore; Joseph W. Kelso, Oklahoma City; Everett S. Lain, Oklahoma City; Fannie Lou Leney, Oklahoma City; Earl W. Mabry, Altus; Earl D. McBride, Oklahoma City; William G. McCreight, Oklahoma City; Samuel T. Moore, Oklahoma City; Robert J. Morgan, Oklahoma City; Kirk T. Mosley, Norman; R. L. Murdock, Oklahoma City; Hugh B. Nichols, Tulsa; Peter E. Russo, Oklahoma City; R. E. Sawyer, Durant;

Alfred T. Baker, Durant; Battey B. Coker, Durant; Jas. T. Colwick, Durant; Ross Lee Curtess, Jr., Oklahoma City; Chesley Para Erwin, Oklahoma City; Raymond C. Gentry, Bartlesville; Charles L. Johnson, Jr., Bartlesville; Joseph R. Karlick, Ardmore; and Ethel M. Walker, Ardmore.

Fifty-five wives from Oklahoma accompannied their husbands and attended the sessions of the Auxiliary of the S.M.A.

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THE JOURNAL
of the
OKLAHOMA STATE MEDICAL ASSOCIATION

EDITORIALS

The editors welcome letters from readers. The Journal is yours. Why not let the Editorial Board know what you think of it. Your comments, whether favorable or unfavorable, may be helpful.

THE AMERICAN ACADEMY OF GENERAL PRACTICE

In anticipation of the approaching meeting of the Oklahoma Academy of General Practice in Tulsa March 17 and 18, 1952, it is gratifying to contemplate the accomplishments of this organized group of America's leading benefactors in the field of medical care. How farsighted the leaders in this group and how fortunate those who have joined in the foundation of a powerful organization for the advancement of medical knowledge and its application in behalf of society. But most of all in defense of medical freedom which is so important for both the profession and the people throughout the so-called democratic world.

Having lost freedom, income and caste and having been woefully overworked under the will of the Ministry of Health and the wiles of their government patients, the general practitioners in Great Britain are contemplating a similar organization with the faint hope of retrieving some of their losses. It is to be hoped that the American Academy of General Practice will lock the barn door before the horse is stolen and that they may have a powerful guard of satisfied patients ready to pounce upon the stealthy thieves masquerading under the guise of Federal Security. Is there anything more despicable than the defamation of a good name! The wolf in sheep's clothing thinks only of his own security. Academy beware! Your organization must become the people's bulwark of freedom.

PHYSICAL DIAGNOSIS

For years the matter of physical diagnosis has been a controversial subject for committees on medical school curriculums. This has come about largely because of laboratory and other accessory diagnostic procedures, particularly the Roentgen ray. With reference to the chest it has been said, "this is the day of Roentgen, the day of Laennec is past." Considering all the implications this is unfortunate, especially in this era when physicians are taught to expect and to welcome short cuts. While it is true that "the stationary condition is the beginning of the end," too rapid progress may prove hazardous.

Several years ago H. R. M. Landis, after reading Lhevine's work on the heart was amazed to find that a physician whose professional experience had been so hedged about by academic influence could write a book so practical for the general practitioner. In a letter to the present writer, Landis discussed the trends in medical teaching and lamented the fact that interns, house officers and other young physicians walked the wards with long laboratory reports on the charts, an x-ray interpretation in one pocket and a cardiogram in the other while the patient longed for the contact and conversation incident to a physical examination and while the physician was missing the throbbing living testimony of the patient's personality and the body's response to pathology as discovered by the five senses.

This trend has not been altered and the loss has been obvious to those members of the profession who learned to follow Hippocrates and Laennec.

Under the stimulus of recent reports concerning the limited knowledge and skill on the part of senior medical students when confronted with patients presenting obvious abnormal physical signs, the writer has scanned some of the recent texts on physical and medical diagnosis in order to see if the deficiency arises through textbook inadequacies or insufficient physical exploration and demonstration. Apparently the fault lies in the latter and the implication is that the teaching of physical diagnosis is being neglected.

To make sure of the modern viewpoint *Medical Diagnosis-Applied Physical Diagnosis* by Pullen[1] was included. It is one of the best illustrated and most comprehensive of the texts now available and its teachings are sound. If the principles and methods

LIBRARY OF THE
COLLEGE OF PHYSICIANS

presented in the modern books on diagnosis were properly taught the student could hardly escape a knowledge of their practical application. Perhaps the tendency to consider courses in physical diagnosis only part of medical diagnosis with definite limitations has led to its neglect without sufficient emphasis on physical examination in connection with the broader concept referred to as medical diagnosis.

At least concentration on physical diagnosis made direct contact with the patient, educated the senses, accustomed the examiner to the feel of the flesh with opportunity to learn the normal and to detect the abnormal. It established the patient-physician relationship with profit to the examiner and satisfaction to the patient. Perhaps the most important phase of the complex process is the development of the habit of physical examination applicable to any structure or organ of the body before running to the laboratory for help. Properly pursued, medical diagnosis becomes an exciting game with warm living evidence to guide laboratory investigations, Roentgen ray examinations, and other tests for corroboration.

In the recent issue of the *British Medical Journal* there is a tribute to the well known consultant Sir Robert Young who had reached the rank of octogenarian. He helped to make important decisions during the king's illness. The following from this tribute adds force to the above discussion:

"One of the characteristics of Sir Robert Young's work by which he will always be remembered is his thoroughness in the examination of the patient. The young physician who leapt to the radiograph and then called in Sir Robert for help in diagnosis was over and over again courteously shown how much could be discovered by the time-honoured method of inspection, palpation, percussion, and auscutation. While he has welcomed all the modern accessories for diagnosis and treatment, he has constantly reminded his younger colleagues of the importance of clinical instinct—what he once described as the "mind's eye" — or sixth sense, really the summation of the knowledge which comes from scientific observation, assistance by the methodical and accurate use of all the five senses and by drawing upon the stores of experience. He has suggested, while protesting that he is no reactionary, that in these days, with the plethora of modern methods, the patient is in some danger of being over-investigated and over-treated."

1. Medical Diagnosis-Applied Physical Diagnosis. Edited by Roscoe L. Pullen, M.D., F.A.C.P., Second Edition with 601 figures, 48 in color. W. B. Saunders Company, Philadelphia and London, 1950. Reviewed in the November, 1950, issue of the *Journal of the Oklahoma State Medical Association.*

PSYCHOSOMATIC MEDICINE

In books, medical journals and popular magazines much space has been devoted to the relatively new term which has merely highlighted an old concept and to some extent confused physicians who have unobtrusively followed this time honored practice, well known since the time of Hippocrates.

Popular publicity with reference to this so-called new practice on the intellectual level has not eased the mass psychology with reference to disease. The attempt to bring about a universal consciousness of the influence of mind over body has not emptied any beds in either psychiatric or general haspitals. Many people have acquired an exaggerated idea of what fear and anxiety can do to them. Believing what they hear and what they read some of them have lost confidence in their doctors, assuming that they have something new to learn and that their patients have suffered because of their implied limitations. The alert general practitioner with years of experience knows all the psychosomaticist claims though he might not recognize what he knows in the psychiatrist's language.

Pope knew the danger of a little learning and he helped the world to realize that it may utterly destroy the bliss of ignorance. In justification of the above, attention is called to an editorial[1] in the *New England Journal of Medicine* entitled, "Stark Unreality." These lines are sufficient to reveal the temper of the author.

"Psychotherapy of various kinds has fairly well proved its value. However, in the development termed 'psychosomatic medicine' hopes and assumptions have been insinuated as facts when proof convincing to the unbiased is not present. The movement is far enough out of critical hands to permit a gullible, unknowing public to believe that it can worry itself into heart disease, hypertension and thyrotoxicosis,—in addition to peptic ulcer,—or, shortly, if divinations go on space, into almost any disease that has previously been classified as predominantly of organic or exogenous origin. Although unpopular and semi-scientific journalism are inculpated, the too enthusiastic and uncritical psychosomaticists themselves are primarily responsible. Certain personality types have been concocted, reputedly

prone to develop characteristics diseases. Nonsupporting or insufficient data do not impede the will to believe."

In further corroboration the following is being copied from the editorial columns of the *British Medical Journal*[2] under the title, "Psychosomatic Medicine."

"With the ever-increasing burden of psychosomatic literature, mainly originating in America, it is important to pause and review the contribution being made to medicine by this movement. It is essentially a reaction against thinking of disease only in such terms as bacterial invasion, hormonal imbalance, or physical change in the body. Psychosomatic medicine implies that disease may be the sequel of nervous or emotional stress — for example, a maladaptation, or loss of power of bodily compensation, to increased autonomic stimulation from the higher centres."

". . . How much of this rests on a solid foundation and how much is due to the missionary zeal of those converted to a new faith?"

After a long discussion of the questionable aspects of psychosomatic medicine and the admission that its chief contribution consists of emphasis on well known but often neglected facts, the editorial closes with this significant statement, "But 'psychosomatic' is an unnecessary term, and the sooner it is dropped from the current literature the better."

Simultaneously the proceedings of the Royal Society of Medicine carries an incomprehensive article, "Psychosomatic Medicine and Psychotherapy" by Ernst Kretschmer, M.D., Professor of Neurology and Psychiatry in the University of Tubingen. Professor Kretschmer summarizes five paragraphs of high priced words by saying that "the whole organism, then, can be likened to the belly of a violin which resonates sympathetically with the vibration of one of its strings at one moment strong and at another feeble."

After pages of psychotherapy in which "classical lengthy analyses" are omitted in favor of "a thorough all-embracing analysis of current conflicts" . . . "active fractional hypnosis" as derived from Schultz' "autogenes training" is advised except where lack of intelligence makes the older methods of hypnotic suggestion more desirable, we follow through innumerable so-called psychosomatic types with equally protean methods of therapy to the following confusing statement, "If we are to grasp the full implications of these principles, we must yet again modify our traditional approach to clinical problems. We are still far too apt to think of an organic disease in terms of X-ray photographs and anatomical specimens and to allow our ideas of what has been happening in the living organism to derive from these abstractions . . . an X-ray plate is not a living oracle, still less an accurate mathematical formula of the course of an illness. It is nothing more than a photographic record of a single instant from a long sequence of functional events. The pathological process itself is rarely as fixed and definitive as its pictorial representation. The anatomical changes are usually the end-product of a long sequence of pathological processes. Further, the anatomical lesions themselves have, in the meantime, given rise to secondary dysfunction. Again, the irreversibility of the morbid process suggested by the X-ray picture may be only an appearance, for it often happens that appropriate psychotherapy may release potentialities for healing latent in the diseased area itself."

After all this the author reports one case in support of his position.

1. New England Journal of Medicine, Vol. 245, No. 20, page 786, November 15, 1951.
2. British Medical Journal, November 10, 1951, page 1136.
3. Proceedings of the Royal Society of Medicine, Vol. 33, page 965.

"TO ALL MY PATIENTS"

In this day when people must be reminded of common decency through organized effort known as public relations is there a single member of the State Medical Association who can afford to be indifferent about the patient-physician relationship? To save conversation and at the same time conserve good relations in spite of the pressure under which most active physicians work, the chaste attractive desk plaque discussing fees and favoring friendly understanding is recommended to every physician whether general practitioner or specialist. The Executive Office of your State Association awaits your order.

This courteous service to your patients will make Oscar Ewing unhappy; it will lighten the work of the Grievance Committee and serve as good evidence in court when unjust charges are made.

See
PLAQUE
Page 84

THE YOUTH OF THE LAND

Through all channels we are buffeted about by successive waves of alarm over the irresponsible attitude of youth toward law and order. Riding the crest of every wave is a serious question which can be answered in a split second by anybody who has a grain of common sense. Briefly the answer is to be found in wholesale urbanizations, motorized transportation, gageted domestication, uncontrolled movies and other audio and visual methods of amusement resulting in relative illiteracy through the lack of constructive reading. Add the comics and so-called progressive education and summer camps where uninhibited self expression is encouraged and the resulting youthful psychology is ready for the adult discussion of unprincipled commercialism, uncurbed corruption and moral depravity in government and other high places. How wonderful our young people are considering parentage, education, moral and socio-economic environment. All this is of medical interest because of the impact upon mental and physical well being.

Under such circumstances the young people are not prepared for the uncertain future in this atomic age. Bertrand Russell in his book *New Hopes for a Changing World,* sounds an awful warning. Using his words, "As I write I do not know—no one knows—whether New York or London will exist six months hence."

Assuming that civilization may be doomed he offers this ironical consolation:

"Perhaps somewhere else, in some distant nebula, some unimportant star has an unimportant planet on which there are rational beings. Perhaps in another million years their instruments will tell them of our fate, and lead them to agree on an agenda for a conference of foreign ministers. If so, man will not have lived in vain."

For America, there is one last ray of hope. The people of the U. S. have done what no other nation has ever done before in a comparable way — they have generously given financial and moral support to other nations where survival is uncertain. With the prevalent warning of malfeasance in high places in our own land and the present plight of other nations a girding of loins with a will for reform may result in unprecedented salvation. According to archeologists, twenty civilizations have failed. Shall the people of the U. S. dig themselves out or shall they accept ignoble defeat and commit this civilization to curious excavators in centuries to come?

So long as grownups neglect Forester's *Two Cheers for Democracy* and make a best seller of Houser's *Look Younger, Live Longer,* and so long as they wink at corruption and misrule in government, we cannot expect the rising generation to arrive at moral and socio-economic maturity.

A CURB ON PATIENTS

In connection with its stand against socialized medicine the Journal has maintained that if the Administration achieves its purpose, the people will suffer equally with the physicians.

Though the insult to them and the evil effects may be immediately less obvious in time the abnormal relationship, the false implications and the temptations to abuse privileges will wreck the golden rule and make unreasonable demands resulting in a rancor which is the normal offspring of compulsion.

In America physicians have a public relations committee for voluntary cooperation in good will. Under the socialized system, members of the British Medical Association, according to a Reuters report, are offering 30 proposals "aimed at reforming the free-for-all health service" and believe it or not, one of the these petitions asks the government for "permission to fine patients who call them out on frivolous complaints or who refuse to follow doctor's orders."

Is it possible for us to profit by exemple?

THE A.M.A. PLEDGE TO MEDICAL EDUCATION

Whether or not the A.M.A. fully met its pledge to medical education for the year 1951, forward looking physicians must know that the medical schools will need help in 1952. It is not wise to wait until December. The deduction holds from January to January. This is a rare opportunity. The physician can give in opposition to government paternalism and cut his income returns thus limiting the government's store for subsidies.

No living physician has fully paid for his medical education. It is high time. Send your check direct to the American Medical Association Education Foundation or to the State Executive Office.

At the Clinical Session of the A.M.A. in Los Angeles, the A.M.A. announced an additional contribution of $500,000.

SCIENTIFIC ARTICLES

SPONTANEOUS RUPTURE OF THE ESOPHAGUS*

ROBERT L. ANDERSON, M.D.
TULSA, OKLAHOMA

In discussing this subject, I would like to bring out the following points. First, even though rupture of the esophagus is a relatively uncommon condition, it is my opinion that it is more common than is generally thought. Second, anyone in practice who sees patients with acute abdominal conditions is likely to see such a case at any time. Third, it is often not thought of; however, the diagnosis can easily be made if the possibility enters one's mind. Fourth, there are certain symptoms and physical findings with which one can make a definite diagnosis. Fifth, one can expect reasonably good results from immediate, definitive treatment. It therefore, behooves all of us to think of the condition and make an early diagnosis if we are to expect satisfactory results.

By spontaneous rupture is meant a rupture of the esophagus that is presumably normal before the perforation occurs. It is not associated with disease in or around the esophagus or with manipulation of or a foreign body within the esophagus.

The first case of spontaneous rupture of the esophagus was reported in 1724 by Boerhaave.[7] In 1946 there were reported by Barrett,[9] only 50 cases in the literature, all without survival. The first clinical diagnosis of this condition was made by Meyer in 1858,[11] approximately 150 years after the first case was described. The first case that recovered was reported in the literature by Barrett in 1946,[9] approximately 100 years after the first clinical diagnosis and 250 years after the disease was first recognized. Since that time, several other cases have recovered from this catstrophe.[1,2,6,8,9,11,13]

Four cases have been observed in the city of Tulsa in the last two years, all of which have been diagnosed clinically and treated with recovery. This, to my knowledge, is the largest series reported in which all the cases survived.

*Presented before the General Session at the Annual Meeting of the Oklahoma State Medical Association, May 21, 1951.

ETIOLOGY

The cause of this condition is not too well established. It is felt that it is due to an increase in the intraluminal pressure within the esophagus. The rupture is nearly always in the terminal three or four inches of the esophagus. This represents the weakest portion of the esophageal wall. Experimentally, the esophagus will rupture when a pressure of five and three-quarters to 11 pounds per square inch is applied, the average being seven pounds per square inch.[11] The rupture is nearly always longitudinal and located on the anterior surface of the esophagus.

It has been pointed out by some observers that it is the rapidity of the increase in pressure and not the total increase in pressure that accounts for the rupture.[11,7] One case has been reported of rupture of the esophagus following a blow on the abdomen presumably due to sudden increase of pressure within the esophagus.[1]

It is probably true that rupture of the esophagus is more likely to occur with the stomach full.[11,14] However, cases have been reported of recurrent vomiting and retching that have caused rupture of the esophagus with the stomach empty. Although this condition occurs in a presumably normal esophagus, in reviewing the cases that have been reported, a large majority of the patients had a history of peptic ulcer or had been excessive drinkers of alcoholic beverages.[2,3,5,6,7,8,9,10,11,12,13,14]

It is my opinion that, while they have had no symptoms of esophageal disease, many of these cases have changes within the wall of the esophagus, either due to local disease or systemic conditions. Possible exceptions to this statement will be in those individuals in which persistent vomiting is associated with neurological lesions or with pregnancy. Occasionally, forceful swallowing in an attempt to dislodge an impacted food bolus or

foreign body will cause rupture of the esophagus.

Generally speaking, therefore, any series of circumstances that will cause over-distention or sudden increase in pressure within the esophagus may cause spontaneous rupture. Perforation is more likely to occur when the esophagus is weakened by concurrent disease.

HISTORY

This condition is usually seen in men (84 per cent) between the ages of 35 and 55 years.[7] These patients are usually well-nourished and have enjoyed relatively good health previously. The onset of the condition is marked by sudden severe pain. This pain may be sub-sternal or epigastric. It is often so severe that the patient is writhing in agony and requires substantial narcotics to relieve it. The pain frequently occurs during or immediately following a large meal or an alcoholic bout. It frequently is preceded by vomiting or retching. In certain of the reported cases, the pain was not so severe at the onset but got progressively more severe within the next few hours. If the location of the pain is epigastric at the onset, within two to three hours the location of the pain shifts up into the region of the lower chest. Commonly it is on the left side and may radiate around into the back and up between the scapulae. Occasionally, as in one of our cases, the patient complains not so much of pain but of the fact that his neck and face have suddenly swollen because of the passage of air under the skin. Extreme thirst is a common complaint.

The past history may be entirely negative, but, as mentioned above, it often is suggestive of peptic ulcer or of chronic or acute alcoholism.

PHYSICAL EXAMINATION OF THE PATIENT

When the patient is seen in the examining room, he may be in profound shock due to the severe pain, or he may not. He is always pale and weak. The pulse is not greatly elevated, being between 90 and 100. The temperature is between 99 and 100 degrees. The respiration is always rapid, being around 30 to 35. The blood pressure is normal. The patient may be extremely short of breath and even cyanotic. This depends entirely upon the degree of chest pain and the presence or absence of fluid in the pleural cavity.

On examination, there may be found crepitus in the supraclavicular area, in the neck, and up into the face. If it is severe, it may also be found over the anterior wall. Examination of the chest may be entirely negative. On the other hand, if rupture into the pleural cavity has occurred, one will usually be able to make out the presence of fluid within the chest. This most frequently occurs on the left but may be on the right side or bilateral.

The abdomen is always very rigid and leads one to believe that the condition is within the abdominal cavity instead of the thoracic cavity. This has led to the misdiagnosis of rupture of an intra-abdominal viscus. Peristalsis is reduced. Otherwise, examination of the abdomen is negative.

LABORATORY EXAMINATION

The red cell count is elevated due to dehydration. The white blood cell count shows slight increase in neutrophils associated with a leukocytosis. X-ray examination reveals no free air beneath the diaphragm. Fluid may be present within the pleural cavity with a pneumothorax also present. X-ray may also reveal emphysema or a fluid level within the mediastinum. Subcutaneous emphysema is a prominent and important X-ray finding.

DIAGNOSIS

With the above findings and information, the diagnosis should be certain. However, other diagnostic procedures may well be carried out. These consist of aspiration of the fluid within the chest cavity. This fluid should be studied for food particles and tested for hydrochloric acid. If either is present, the diagnosis is certain. Often the odor and color of the fluid is important. The patient may be given a swallow of barium or lipiodol and, by means of fluoroscopy and X-ray examination, this media will outline the perforation and one can make out a peri-esophageal pocket or a direct communication into the pleural cavity.

If one is still in doubt, dye can be introduced into the esophagus and recovered by a needle within the pleural space and thus substantiate the diagnosis.

DIFFERENTIAL DIAGNOSIS

Ruptured esophagus is often confused with rupture of a peptic ulcer. In the latter condition, however, no subcutaneous emphysema is present. No fluid is found in the chest and usually free air is found beneath the diaphragm.

Acute pancreatitis, which may simulate this disease, will produce no emphysema and

is usually associated with a high blood amylase. Free fluid in the chest is occasionally seen with acute pancreatitis.

Mensentery thrombosis may cause simular pain and shock, but is not associated with emphysema or fluid in the chest.

Dissecting aneurysm of the aorta may produce any of the symptoms that have been outlined, except subcutaneous emphysema.

Coronary thrombosis should easily be ruled out by an electrocardiogram.

Pulmonary embolus may simulate this condition, but, again, does not produce subcutaneous emphysema.

Spontaneous pneumothorax may produce any of the symptoms just described including subcutaneous emphysema. However, the pain is usually much less severe, the prostration is less severe, and X-ray of the chest will invariably reveal some degree of collapse of the involved lung. Fluid may occur in spontaneous pneumothorax but that is not until 24 to 48 hours after the acute onset.

Rupture of a bronchus may produce severe mediastinal and subcutaneous emphysema together with collapse of the lung followed later by a fluid formation within the pleural cavity.

Neither of the last two conditions named are associated with vomiting, retching, or a full stomach. They rarely cause epigastric or sub-sternal pain, and they are almost never associated with epigastric tenderness and board-like rigidity of the abdomen.

Rupture of periesophageal hermation of the stomach into the mediastinum with extension into the pleural cavity may simulate rupture of the esophagus in every respect. However, by careful study by fluoroscopy and X-ray examination following barium swallow one should, in most cases, be able to demonstrate the herniated stomach and thus make the diagnosis. Since the treatment is the same as for ruptured esophagus, actually a differentiation of these two conditions is of only didactic importance.

TREATMENT

Treatment of spontaneous rupture of the esophagus may be divided into conservative management with simple drainage of the pleural cavity or a more radical procedure of thoracotomy with actual closure of the perforation.

In either case, the patient should first be treated for shock if shock is present. Blood and fluid should be given parenterally, as indicated.

If there is evidence of a tension pneumothorax with a partial collapse of one or both lungs, an under water suction drainage apparatus should be employed in order to immediately decompress the tension pneumothorax. This treatment in itself may be life-saving.

If mediastinal emphysema is marked and is interferring with vital functions, the mediastinum may be entered by making an incision above the supra-sternal through the anterior fascia and muscles of the neck. A catheter may then be introduced into the mediastinum in between the fascial planes and the mediastinal emphysema relieved.[4] Such a procedure can be done easily and quickly under local anesthesia.

The patient should receive nothing by mouth. Chemotherapy should be instituted immediately upon the patient's arrival and multiple parenteral antibiotics should be administered immediately in rather heroic doses.

If the diagnosis is in doubt, further diagnostic procedures such as barium study, lipiodol study, aspiration of the chest fluid for study, and X-ray of the chest and abdomen should be carried out as quickly as the patient's condition will permit. Only those procedures which are necessary for diagnosis should be carried out.

When a definite diagnosis has been reached, a thoracotomy should be carried out. If the patient's condition warrants it, the procedure of choice is surgical closure of the perforation and drainage of the mediastinum either retropleurally or through the pleural cavity, or both. The lung should be re-expanded and suction drainage should be instituted in order to maintain a negative pressure within the plueral cavity. Needless to say, at the time of the thoracotomy, the pleural cavity should be thoroughly cleansed and antibiotics should be instilled into the pleural space.

Should the patient's condition not tolerate closure of the perforation, then a simple thoracotomy should be carried out with cleansing of the pleural space. Adequate drainage should be maintained from the perforation to the outside either retro-

pleurally or through the pleural space. An attempt should be made to re-expand the lung and to maintain a negative pressure. The patient should receive blood and fluid as necessary during and after the operative procedure. It is my belief that, whether or not the perforation is closed, a Levine tube should be introduced into the esophagus, past the perforation, and into the stomach at the time of the thoractomy. The tube can then be used for decompression of the stomach as well as for feeding at a later time. These patients should receive nothing by mouth for at least seven days after surgery, at which time, if the patient's condition permits, small tube feedings should be instituted.

DISCUSSION

Spontaneous rupture of the esophagus can be confused with any acute abdominal emergency. However, there is a triad of signs and symptoms that is pathognomonic of this condition. This triad is: first, rapid respiration; second, rigidity of the abdomen; and third, crepitus in the neck due to subcutaneous emphysema.[9] Of these findings, the most important one is subcutaneous emphysema. One must always inspect the patient for emphysema and suspect ruptured esophagus if it is present.

Barium swallow or lipiodol instillation together with study of the pleural fluid, if it is present, and an X-ray of the chest and abdomen will substantiate the diagnosis. These procedures should be carried out, although the patient may be desperately ill, if the diagnosis is in doubt.

By these diagnostic methods, four cases of spontaneous rupture of the esophagus have been diagnosed and successfully treated in the past two years in the city of Tulsa. The prognosis of the patient is in direct relationship to the amount of time elapsing between the onset of the condition and the institution of treatment. It is, therefore, important that one arrive at a diagnosis and carry out the proper treatment as quickly as possible.

SUMMARY

(1) Spontaneous rupture of the esophagus is probably more common than is usually thought.

(2) The history, physical findings, diagnosis, and treatment of a typical case have been outlined and the importance of a diagnostic triad emphasized. This triad is: (a) rapid respiration, (b) abdominal rigidity, and (c) subcutaneous emphysema.

(3) The ultimate outcome is in direct relationship to the time elapsed between the onset of the disease and the institution of treatment. Therefore, every effort should be made toward an early diagnosis and adequate treatment.

(4) Four cases have been treated in the last two years, all with a correct clinical diagnosis and with adequate treatment followed by recovery.

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MANAGEMENT OF UROLOGICAL PROBLEMS IN GENERAL PRACTICE*

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The role of the general practitioner in the practice of medicine has been the subject of considerable discussion in this age of medical specialization. The purpose of this paper is to re-emphasize the role of the general practitioner in the management of urological problems and to attempt to define his relationship with the urologist.

There is no field in medicine which leads itself to more rapid and exact diagnosis than the specialty of urology. The genito-urinary tract permits excellent visualization by radiographic studies and direct observation. In addition, the products of the genito-urinary tract, such as urine, prostatic and vesicular secretions and semen are readily available for examination. The general practitioner need only apply his powers of observation, deduction and several simple laboratory procedures to arrive at a working diagnosis of the presenting urological problem. The expenditure of the small amount of time required to obtain an accurate history, observe the male patient void, collect the urine in two or three glasses, examine the genito-urinary tract and perform the simple procedure of urinalysis and microscopic examination of stained urinary sediment, prostatic secretions or semen can obviate the sins of omission and commission which are so prevalent. These sins consist of referring the patient to a specialist when the problem can be handled equally well by the family physician, ignoring obvious indications for a thorough urological examination and maintaining prolonged and unsuccessful treatment of a urological problem.

In addition to the management of specific urological problems, the general practitioner has the great opportunity and responsibility for the early detection of carcinoma of the prostate. This condition will be present in one out of five men over the age of 50 years. Cure of carcinoma of the prostate can be accomplished only by radical surgery. Since the early case is asymptomatic, the very life of the male over 50 is dependent upon the routine rectal examination and detection of small hard nodules in the prostate by his family physician. The reduction of carcinoma of the prostate mortality is the responsibility of the general practitioner. He and he alone can direct the suspicious case to early and complete cure.

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HEMATURIA

Hematuria is one of the most common and significant findings in urologic disease. It may be painless or painful. It may be gross or microscopic. It may be initial, terminal or mixed.

Painless hematuria denotes urologic malignancy in approximately 90 per cent of all cases. The prognosis for cure diminishes markely with each succeeding episode. For these reasons, the patient should be promptly dispatched to the urologist for thorough investigation. Procrastination and dilatory treatment are grossly injurious to both the patient and his physician.

Hematuria which is painful at the outset and which is associated with systemic manifestation and/or laboratory findings of associated infection and which is initial or terminal in appearance, suggests an inflammatory process involving the bladder, prostate or the urethra. Such a case may be properly treated with the appropriate drug based upon the presence of coccal or bacillary organisms found in the stained urinary sediment. Failure of the hematuria to disappear within a week or its early recurrence calls for prompt referral of the patient to the urologist.

The physician who temporizes with hematuria, jeopardizes the life of his patient.

URETHRITIS AND PROSTATITIS

Few conditions will bring a patient to his physician quicker than the appearance of a urethral discharge. To the layman, this bespeaks a venereal disease and too often his physician will casually agree and offer a "shot" of penicillin. If the offending organism is a penicillin sensitive gonococcus, all is well. However, many urethral exudates are

not primarily due to gonorrhea and such management fails to alleviate the complaint. Further than this, it subjects the patient to the unwarranted psychological trauma of having a "V.D." and undermines his confidence in the competence of his physician. A simple Gram stain of the exudate will differentiate between sepcific and non-specific urethritis.

One of the most common causes of non-specific urethritis is an associated inflammatory process in the seminal tract. However, it is possible to have a purely localized urethritis and the exact diagnosis can be established by the three glass urine test and examination of prostatic and vesicular fluids. One should bear in mind that the inflammatory products in the prostatic secretions may not appear before the second examination.

The treatment of urethritis consists of the use of sulfonamides or one of the newer antibiotics (Penicillin is of little usefulness because of the usual mixed nature of the infection), massage of the urethra over a sound to break up small peri-urethral abscesses and promote better drainage, progressive urethral dilatation and the instillation of an antiseptic solution in the urethra.

Prostatitis with or without an associated seminal vesiculitis is the most common urological problem in the male. In the acute form, the physician should exercise extreme care in the manipulation of the prostate. Treatment consists of the use of the sulfonamides or the newer antibiotics plus the application of heat to the perineum by means of hot sitz baths or diathermy. The advent of modern therapeutic agents has made actual suppuration a rare complication, but when it does occur surgical drainage should be carried out promptly. The acute form of prostatitis has many gradients of severity and frequently resolves itself into the chronic form.

Chronic prostatitis may be properly compared to chronic sinusitis. Once the patient is aware of the fact that his prostate is like a sponge, with innumerable glands which drugs cannot always permeate, he is more inclined to cooperate with his physician in the management of the problem. Treatment of chronic prostatitis requires patience and diligence on the part of both the patient and his physician. Treatment should be confined to the periods of exacerbation only and not be permitted to drag on indefinitely. The sulfonamides are very useful, when tolerated; otherwise, a wide-spectum antibiotic may be used. The patient should refrain from alcohol and sexual intercourse and should take nightly hot sitz baths. Copious amounts of water aid in lavaging the inflamed urethra. Any one of the anti-spasmodic preparations is useful for relief of bladder tenesmus. In addition, the prostate should be massaged gently no oftener than twice a week at the outset and later once a week until such time as the microscopic appearance of the secretions has reached the maximum improvement. Simultaneously the bladder may be irrigated with a mild antiseptic such as potassium permanganate or acriflavine solution and the urethra progressively dilated with sounds. It is in regard to the use of sounds that I wish to speak a word of caution. Their use is extremely valuable, however, the occasional use of a metallic instrument in the urethra is fraught with considerable danger, and must be approached with respect and trepidation. Unless the physician has had considerable experience in the passage of sounds, he should restrict himself to the use of filiforms and followers which will obviate the possibility of severely traumatizing the urethra.

Those cases which prove refractory to the treatment as outlined should have a cystourethroscopic examination after a month's trial. Not infrequently, the cystoscopist will encounter a contracture of the vesical orifice, papillomas, cysts, polyps, granulation tissue or even neoplasms which require special therapy not available to the general practitioner.

POSTERIOR URETHRITIS AND CYSTITIS IN THE FEMALE

The single most common entity encountered in office urology is the problem of cystitis associated with posterior urethritis in the female. This condition may be encountered at any age, although it is more frequent in the post menopausal period. The onset of symptoms is frequently acute and often associated with gross rematuria. The frequency of urination with severe urgency, dysuria and tenesmus are most distressing so that prompt and effective treatment guarantee a grateful patient. Treatment of the acute phase consists of acidification or alkalinization of the urine dependent upon urinary p.h. and the administration of the sulfonamides or antibiotics based on the type of infection as determined by examination of a strained urinary sediment. Anti-

spasmodics are extremely helpful in allaying the distressing symptoms. Relief is generally prompt, although recurrences are common.

The patient who presents frequent recurrences of cystitis with evidence of infection should have a thorough urological examination inasmuch as the infection may be arising from the upper urinary tract and may be a harbinger of serious urologic disease. In the absence of upper urinary tract change, the focus of infection may lie in the genital tract or colon and measures should be instituted to eradicate such a focus.

The general practitioner encounters daily the female patient who has chronic "bladder trouble." Not infrequently she will complain of associated "nervousness" and attribute her bladder complaints to her "nerves." The urine in such cases may contain no leukocytes but will generally reveal numerous epithelial cells. Urine cultures frequently reveal no growth and careful examination of the urethral orifice reveals no caruncle, diverticulum or mucosal eversion. Treatment of this "posterior urethritis-trigonitis syndrome" consists of progressive dilatation of the urethra up to 35 to 40F. The patient should be advised that the condition is recurrent and that she should return promptly upon the reapperance of symptoms. The patient who has frequent recurrence of syptoms of bladder irritation, in the abscence of abnormal urinary findings, should be referred to the urologist so that the diagnosis of contracture of the vesical orifice or interstitial cystitis (Hunner's ulcer) may be ruled in or out.

PENILE LESIONS

The penis is an organ which each male must necessarily hold in his hand each day. For this reason, among others, penile lesions are generally brought to the family physician in an early stage. Unfortunately, the general practitioner commonly fails to recognize and treat or refer penile lesions. This indictment does not include venereal diseases.

Most deliveries are made by the general practitioner. Prompt examination of the infant will reveal the presence of hypospadias, pseudo-hermaphroditism or congenital stenosis of the urethral meatus. Early awareness by the parents of the nature of the congenital abnormality will result in early correction with attendant establishment of normal genito-urinary function and avoidance of severe psychological trauma.

Herpes progenitalis is a common lesion which manifests itself by the presence of a small group of vesicles on an inflammatory base and is accompanied by itching and burning. Treatment consists of keeping the lesions clean and dry by the use of a mild antiseptic powder and by circumcision for the recurrent cases where a long prepuce is present.

The middle-aged male occasionally presents himself with the complaint that the penis bends during an erection. This condition is known as plastic induration of the penis or Peyronie's Disease. The pathologic basis of this problem is the deposition of fibrous tissue plaques which occasionally become calcified, on the dorsal septum of the corpora cavernosa. The condition is often painful and frequently makes sexual intercourse impossible. A fairly high percentage of improvement may be obtained by the prolonged use of Vitamin E in doses of 200 I.U. daily.

For practical purposes, one can say that cancer of the penis never occurs in men circumcised in infancy. One needs no better excuse for the carrying out of routine circumcision in infancy. It is to be regretted that most cases of carcinoma of the penis which find their way to the urologic surgeon have had previous circumcision for the presenting lesion without identification of the neoplasm. The resulant delay with opportunity for metastases could be avoided by histologic examination of all unusual lesions of the penis. There is little excuse for failure to diagnose carcinoma of the penis in an early stage.

Stenosis of the external urethral meatus is a fairly common entity in both children and adults. The accompanying symptoms are those of obstruction and can be alleviated by simply meatotomy. In performing a meatotomy it is useful to insert a single suture at the lower angle of the incision in order to prevent union before epitheliazation occurs.

ABNORMALITIES WITHIN THE SCROTUM

The scrotal contents are readily palpable through the thin wall of the scrotum. Nevertheless, the diagnosis of intra-scrotal pathologic conditions may tax the physician's clinical acumen.

The differential diagnosis between epididymitis and torsion of the testis is of extreme importance inasmuch as the latter

calls for prompt surgical intervention. The differentiation can be usually made on the basis of epididymitis coming on gradually and generally having associated inflammatory reaction in the remainder of the seminal tract. Torsion has an acute onset and is not associated with a febrile response or inflammation in the seminal tract. In addition, in torsion, the epididymis and testis are pulled up toward the external inguinal ring and one can palpate an abnormal relationship between the opposite testis and epididymis. Where doubt exists as to the exact diagnosis, surgical exploration is indicated. If torsion exists, the opposite testis should be anchored to the scrotum.

Palpation of scrotal contents should be carried out bi-manually. Irregularities or enlargement of a testis call for early surgical exploration to eliminate neoplasm.

Cryptorchidism is associated with an increased incidence of testicular malignancy. Bilateral crytorchidism beyond puberty results in sterility. Pre-pubertal treatment is imperative and consists of one or two courses of pituitary gonadotropic hormones plus suction with a breast syringe at the external inguinal ring. Orchidopexy should be carried out before puberty when conservative treatment fails.

The presence of a painless indurated epididymis and a thickened, beaded vas deferens suggests the presence of genito-urinary tuberculosis and calls for prompt, thorough investigation of the genito-urinary tract for this disease.

SUMMARY

This paper has dealt with only a few common and relatively simple urologic problems. The urologist should serve as a consultant to the general practitioner in those cases which are obviously complex or refractory to the usual accepted mode of treatment. The best general practitioner is the one who manifests diagnostic acumen and not the one who refers the most patients to specialists.

FACE INJURIES*

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In the treatment of face injuries, one must, of course, start out with the emergency phase. When one is confronted with a face injury, it seems that it is best to first make an estimate of the damage that is done and then set out a plan for the care of that particular case. Only in this way can one hope to secure a satisfactory result, both to the patient and to the doctor. It goes without saying, that one who intends to treat face injuries should have some knowledge of the anatomy and the physiology involved and certainly be equipped with the minimum of tools for such work.

The examination of the case should be complete so that one is satisfied as to the extent of the injuries. Even though the injury may seem to be small or so-called minor, there may be something in the depth of the wound that is startling when it is uncovered. One should then make special examinations, such as x-ray, blood study, blood pressure, etc., and certainly, if possible, inquire as to the patient's susceptibility or idiosyncrasies to drugs, etc.

The repair of a face injury, ideally, of course, should be done in an operating room. One may do the work under local anesthesia or it may require general anesthesia. Of course, shock and hemorrhage must first be dealt with if it is present, the airway must be seen to, especially when edema is rapidly developing; and after a plan is made up, one may proceed with the care of the case. In this length of paper, the general principles can be hinted at but certainly a complete dissertation on face injuries cannot be carried out. One can operate on a great many of the patients suffering from these injuries under local anesthesia, especially the patients that are old enough to understand and answer questions. This holds true for a great many children. Regardless of what part of the face or what is involved, a few principals should not be overlooked.

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1. Complete hemostasis should be insisted upon in every instance. All bleeding points should be completely controlled before closure is begun.

2. If bone is exposed, it should be preserved. Any bony fragment that is attached and viable should be preserved for future restoration.

3. Debridement, therefore, is almost nil or extremely limited about the face structures.

4. When closure is begun after thorough cleansing of the parts with rapid and thorough flushing of sterile water or saline, each layer of the facial structures should be identified and closed with non-absorbable sutures preferably, especially in the early, clean wound. Then when the skin is reached, fine sutures of interrupted, non-absorbable material will afford the best result.

5. Ordinarily, no drain is used in the early, non-contaminated wounds.

6. Early removal of the sutures is essential to avoid marks from the sutures.

7. Pressure about the eyes and face in general is a good principle to employ if it is possible to secure. Sometimes, ice caps or ice can be applied to a part to lessen the swelling.

Occasionally, one cannot close a wound of the face because of some other injury, because of severe shock, or some other cause, so that the wound should be treated by hemostasis and a sterile dressing. Then, when the patient's condition warrants, the wound may be closed secondarily. To do this, the patient usually needs support by blood, antibiotics, debridement of the wound edges and closure. In this case, one may wish to employ a drain in each angle.

Often, in these cases, it is necessary to have the help of different doctors, for instance, the eye specialists, ear specialists, nose specialists, the dentist or maxilo-facial team.

In closing wounds about the face, it is well to follow the course of the crease-lines if possible. Sometimes this can be done by remembering that the crease-lines run in certain directions and to follow these in the closure of the wound. All foreign bodies must be removed; first, in behalf of the patient; and second, because of the legal aspect.

In compound fractures either from gunshot wounds or severe injuries, it is often indicated to have the aid of the dentist or some similar skilled person to assist in this type of injury. In our community, we rely a great deal on the oral surgeon where fractures of the jaw are present. Fractures of the nose and fractures about the jaw and face can often be reduced after a few days. It seems to me that some of the best results are obtained after the edema has lessened and the patient is restored to a good general condition and then carefully putting the parts together. This is especially true of the nose, fractures of the zygoma, and some fractures of the jaw.

Immediate skin cover may be done in cases thus saving time, preventing infection and a second procedure.

After the acute conditions are cared for, there remains a group of cases where a decision must be made as to whether to do anything about the scar, whether to replace a part that is lost, to improve contour, or to improve the conditions generally.

As a rule, all of these cases should have several months to quiet down and allow for absorption of the scar before any surgery is undertaken. In case of restoration of a part that requires a pedicle graft, the pedicle can be started at any time giving sufficient time for build-up of circulation and color. If the contour is not satisfactory, one must decide whether to use bone, cartilage, tantalum, or some other material for making up the defect. We use tantalum in cases about the orbit and about the jaw quite frequently. So far as contour is concerned, I get better results more consistently with the patient's own cancellous bone. While we do have a bone bank and have a good supply of bone, there is still some absorption, and sometimes absorption goes beyond what we hope for and the part has to be restored.

One of the good features of the old cases is that they can be fitted into the schedule, plenty of time can be allowed for development between operations, and the patient can have time to recover from surgery.

It goes without saying that any of the secondary operations must be done when the original wound has been cleared of infection or malignancy, when the patient's general condition is good, and if necessary, he may have time to get ready a supply of blood or to take whatever medicine is indicated.

LOCAL ANESTHESIA IN OBSTETRICS*

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The state of Minnesota has now had something more than two years of experience with a state wide maternal mortality study in great detail. There is every reason to believe that the Minnesota experience is repeated elsewhere. It is clear that obstetric anesthesia requires more practical attention than it has been given. It is almost as dangerous in Minnesota to the life of the mother as eclampsia when considered from the point of view of total deaths. Nothing is really known of its morbidities over a general population. The effects on the child have been studied almost entirely in such groups as well controlled clinics and little is really known of its effects in the broader field. There may be justification to fear that the fetal damage and destruction from maternal anesthesia is of distressingly frequent occurrence.

Much of the risk to the mother lies in two directions. With inhalation anesthesia, the problem is largely that of an almost inevitably badly surgically prepared patient when the anesthetic is used for delivery from below. The great risk to the mother under these circumstances is aspiration of vomitus. With conduction anesthesia, the difficulties which arise are usually not directly inherent in the method but are in the application of it. It is too often forgotten that the pregnant woman is intolerant of dosages of intra-thecal anesthetic drugs which will be withstood by the non-pregnant. Unskilled anesthetists overlook the significance of hyperbaric solutions. Too often, spinal and caudal anesthesia are looked upon as procedures which make skilled and continuous control of the patient unnecessary. The reverse is true.

From the baby's point of view, it is clear that for practical purposes no analgesic or anesthetic drug administered to the mother, with the exception of local anesthesia, is without risk. All who are doing obstetrics should familiarize themselves with the details of these drug effects. Snyder[1] has brought this information together in a useful monograph. Some of these effects are of a small order and most often require particular circumstances such as prematurity, traumatic delivery or the addition of general anesthesia to make them very evident. Others such as morphia carry a greater risk and are gradually being eliminated from use. But the risks are there and careless or routine administration will lead eventually to trouble. It should also be made clear that analgesic drugs in safe quantities such as Demerol and the barbiturates which are relatively well tolerated by the fetus, can produce serious depression in the baby when inhalation anesthetics such as ether are added. The effects of such combinations have escaped attention for too long.

At this point, it might be wise to make one strong statement. The quaint practice of anesthetizing, usually with open ether, the patient who appears to be about to deliver before the responsible physician arrives, has no justification. It carried lethal risks to both mother and baby which are intolerable. The same strong statement may be made in the baby's interests in regard to mechanical methods which are designed to prevent delivery for the same purpose.

This discussion is designed to apply primarily to a part of the whole obstetric analgesia and anesthesia problem to which too little attention is given. Those who do most of the talking and make most of the reports in this field are senior people working in completely equipped and completely staffed institutions. What may be reasonably safe and efficient in such circumstances may be impossible, unwise, unnecessary or unsafe in a less imposing milieu. Actually, it is under the latter circumstances that most of the obstetrical cases are being handled in this country. The desirability of safety and simplicity looms large here.

What are we trying to accomplish with obstetric analgesia and anesthesia? Complete relief of pain and complete safety for mother and child? Neither of these is obtainable in an imperfect world and it is evident that the combination can be mutually exclusive. The author is frankly conditioned as a teacher, a practitioner and an observer of such data as that obtained by the ma-

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ternal mortality study in Minnesota to lay primary emphasis on safety. Much too much damage has been thoughtlessly done to obstetric patients and their babies. Our efforts should be bent first of all to efficiently exclude from delivery from below, those patients who have such abnormalities as may be reasonably expected to produce pounding difficult labors. This may be a complicated and exacting task but it has great rewards. For the rest, one should aim at the spontaneous delivery of a child who not only breathes but cries at once. The mother should be conscious and cooperative throughout. She should be left in such a state that she can walk from the delivery room to her bed and move more or less freely about her room after a reasonable rest. Analgesia should be effective and above all, safe. And both of these should be designed to produce the conditions described above. With most patients, this can be accomplished.

This report is not primarily concerned with analgesia but a word might be said about it. The first part of the usual labor lasts in the primipara until four to five centimeters of cervical dilatation has been reached. The multipara will usually tolerate a centimeter more. During this time the usual patient needs the reassurance of an understanding and careful physician more than she needs drugs. Her problem is fear rather than pain. A careful examination on admission and an occasional visit during this time is more effective than drugs. From this point, the upper vagina begins to be distended and this is painful. An analgesic drug such Demerol, given only in doses which will make the discomfort tolerable to the individual patient, is usually sufficient and is safe, particularly if inhalation anesthesia is not to be given later. By the time the cervix has reached eight or nine centimeters dilatation, something more is usually required. It is our practice to move the patient to the delivery room at this time for one of two procedures. Fifty per cent nitrous oxide and oxygen as an analgesic may be given in doses of a half dozen deep breaths just as the contraction is starting. This is the method of choice for those patients who appear to be proceeding rapidly in labor. For the primipara who is moving more slowly, paracervical block as described by Rosenfeld,[2] Gillam[3] and Freeman[4] has been effective for about 90 minutes and as far as can be determined, completely safe.

For the paracervical block, two spinal needles are used. These are of such bore that one will fit through the other. The needle with the larger bore is cut to a length which will allow the smaller needle which fits through it to protrude 1.5 centimeters beyond its end. Under sterile precautions, the vagina is irrigated with 1-1000 aqueous zephiran. The larger bore needle is then introduced with the fingers which carry the end ordinarily attached to a syringe, up to a point just lateral to the junction of the cervix and vagina. This serves as a guide through which the smaller needle attached to the syringe is introduced. It can only protrude for 1.5 centimeters. After being sure that the needle point is not in a vessel, 10 to 20 cubic centimeters of the anesthetic agent is injected. This is repeated on the opposite side. About five cubic centimeters of solution is injected into the area of each utero-sacral ligament. One per cent Procaine and one and one-half per cent Metycaine have been used, usually with the addition of two minums of 1-1000 adrenalin to each 30 cubic centimeters of solution. A newer drug, Xylocaine, is now being tried and appears to be effective over a longer time than the others. This is not a complicated procedure and this department has seen no untoward either immediate or remote effects. Care must only be taken to so control the needle point with the finger that there is no possibility of puncturing the head of the fetus.

At eight to nine centimeters dilatation in the progressing multipara and at full dilatation in the primipara, pudenal block is almost routinely carried out. One per cent procaine is used and to this is added one or two minims of 1-1000 adrenalin per 30 cubic centimeters of solution. Adrenalin is not used in any circumstances in the presence of hypertensixe toxemia of pregnancy, hyperthyroidism or hyperfunctional disease of the adrenal medulla. It is best avoided in the presence of rheumatic heart disease more serious than functional class one and in all patients with congenital heart disease. The injection of adrenalin automatically rules out the use of Cyclopropane. Indeed, it is the opinion of this department that Cyclopropane should never be used in the patient who has not been prepared with barbiturates.

There is nothing complicated about the techniques of pudendal block. After the usual preparation and draping for delivery, the vagina is irrigated with 1-1000 aqueous

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zephrian. Care must be taken not to mistake the aqueous zephiran for the procaine solution. A small wheal is raised in and below the skin just medial to each ischial tuberosity and on the perineal body. About five cubic centimeters of solution is injected to catch the perineal branches of the pudendal nerves where they emerge from behind the tuberosities of the ischia. The solution is then injected to produce a field block of the posterior two-thirds of the vagina. About five cubic centimeters is distributed to each levator muscle. Another five cubic centimeters is injected well up laterally in each vaginal wall at the level of the ischial spines. All of this injection is controlled for position by a finger in the vagina. The area where episiotomy may be carried out is particularly widely and well infiltrated. The anesthesia from this will be effective for at least 90 minutes and often longer.

This anesthesia will obviate any significant discomfort from the lower two-thirds of the vagina. The discomfort of the last part of the second stage is obviated and it is possible to have most patients deliver quietly and slowly between contractions by voluntary effort. They will not know that an episiotomy is being done and it can be repaired without any discomfort. With gentleness, low forceps can be used. Breech extraction is facilitated since the levator muscles are flaccid and since it is possible to so time the delivery of the breech that the uterine contractions can be made to coincide with delivery of the head into the pelvis. Forceps to the after-coming head can be comfortably applied if it is done gently. Voluntary effort from the patient is available as an aid.

Some thousands of such infiltrations have been done by the department for delivery, cesarean section and for gynecologic surgery. There has as yet been no evidence of any untoward effect from the Procaine. An occasional patient is abnormally sensitive to adrenalin. This will be evidenced by transient rises in blood pressure, a transient pounding or sense of fullness in the head and occasionally, the contractions of the laboring uterus will stop for 10 to 20 minutes. None of these are cause for alarm. There is no evidence of an undesirable effect on the fetus. There are no disasters such as can occur with most of the other anesthetic agents. The worst that can happen is that the inexperienced person will get incomplete pain relief until he has mastered the simple maneuvers involved.

For more complicated deliveries, other forms of anesthetics may be required. These are infrequent and each presents its own indications. It would carry this discussion too far afield to consider these in detail. The symposium as reported in the *Journal of the American Medical Association*[5] might well be consulted in this regard.

The same general principles which were applied to normal delivery from below apply to cesarean section. Already within this year, there are two cesarean section deaths in Minnesota attributed to the anesthesia used. There need be no concern with the anesthetic choices made in critical, well equipped institutions. For the broader field, local anesthesia offers a superior and completely safe anesthetic. It has been said[5] that local anesthetic does not offer sufficient control of discomfort or sufficient relaxation. That is simply not true. The author has used no other anesthetic for cesarean section for nearly 20 years. And this applies to cervical and extraperitoneal sections, to accompanying tubal sterilizations and to those radical sections where it is indicated. It is not completely without discomfort. No anesthesia is without some undesirable feature. There is no evidence that local anesthesia has yet destroyed a patient or damaged a fetus at cesarean section. There is no other anesthetic for which as much can be said.

A variety of techniques have been reported. The author's own is described simply because it has functioned satisfactorily in his hands. Premedication is usually made up of six grains of Sodium Amytal or an equivalent amount of another barbiturate given three hours before operation. Scopolamine grs. 1/150 or 1/200 is given when the patient leaves the ward for the operating room. One-half per cent Procaine is used with Adrenalin added as described above. The line of incision is infiltrated with a generous quantity. This is flared out at the symphysis pubis and carried down over the pubis so as to be well beyond the bottom of the incision. At four centimeter intervals, the needle is introduced at right angles to just beneath the fascia and about three cubic centimeters of the solution is injected at each point. A field block is then produced on both sides following the lateral margins of the rectus muscles. Solution is injected

just below the anterior rectus sheath in the same way as was done at the line of incision. As the incision is made, solution is injected again beneath the rectus sheath and into the peritoneum itself. Great care is taken to flare this out at each level at the symphysis. For the standard cervical cesarean section about five cubic centimeters of solution is injected beneath the utero-vesical reflection and is massaged laterally with the finger. About three cubic centimeters of solution is injected into the broad ligament at the tubo-uterine junctions for tubal sterilization. For radical cesarean section, infiltration of the ovarian ligaments and of the parametria adjacent to the lower level of incision is added. Extra peritoneal section can be done with only the abdominal wall infiltration but it is preferred to inject the lines of fascial separation over the bladder. This helps with the necessary dissection.

Gentleness in the handling of tissues is essential in work within the abdomen under local anesthesia and to a lesser extent elsewhere. This is a desirable situation under any conditions. Under local anesthesia, the patient will enforce it.

These then are disciplines which will on their application, add to the safety of mother and baby. They are recommended for that reason.

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RECENT ADVANCES IN THE DIAGNOSIS AND TREATMENT OF CANCER*

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In establishing surgical principles for the treatment of cancer of the colon and rectum, Maes and Essrig[1] list as the first two, early diagnosis and radical operation. Assiduous attention to these two principles have produced the greatest advances in the treatment of cancer and until surgery is completely replaced, these two principles will form the basis of most rational approaches to the problem.

In a search for methods of early detection of cancer, human ingenuity and perseverance have perhaps been the greatest contributing factors. Newer skills and techniques have continued to open and explore avenues of diagnostic significance. A better understanding of malignancy on the part of individual physicians and adeptness in the recognition of cancer has led to an earlier diagnosis in countless cases. Pertinent histories and systematic physical examinations will continue the trend. This is significant when one considers that most carcinomas of the breast are palpable before they metastasize to the axilla, and that 75 per cent of carcinomas of the rectum can be felt by the examining finger.

Laboratory examinations are important aids. A physician with a high index of suspicion of malignancy is cautioned to look further into an unexplained anemia and to investigate a low gastric acidity. Great strides have also been made by the roentgenologist. With newer skills and techniques they are able to place the site of a peptic ulcer on either side of the pyloric ring. This is significant when one considers that from 12 to 15 per cent of gastric ulcers are malignant. With barium enemas and contrast techniques they are able to examine the entire length of the colon and by encouraging barium to pass the ilio-cecal valve, they are able to differentiate a carcinoma of the right colon from terminal ileitis.

Endoscopy has made an important contribution to the early diagnosis of cancer. Already reports are appearing in the literature of biopsy specimens of gastric mucosa taken through a gastroscope. The importance of biopsies has long been recognized but the inaccessible nature of some portions of the body have presented the removal of

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adequate tissue specimens. These difficulties are gradually being overcome by better methods of endoscopy.

Of great significance are the cytology examinations. The examination of cytology smears taken from the vagina and cervix are now so reliable that false negatives and false positives are below 10 per cent. In many cases, cytologic examinations disclose the presence of carcinoma of the cervix when biopsies are negative and only later confirm the cytologic study. Cytologic examination of bronchial secretions either from the sputum or aspirations of the bronchial tree are positive in 50 per cent of the cases of carcinoma of the lung. Special stains which are now replacing the Papanicolaou stain and the increasing abilities of the cytologists are responsible for these improvements. Tracer studies with radio-active iodine have been used to discover metastatic sites of carcinoma of the thyroid. In future years radioactive isotopes may be used to detect metastases in any malignancy.

When all of the methods of examination have been exhausted, surgical exploration may be the resort. Even this, by virtue of the antibiotics and blood transfusions has been made less hazardous in recent years.

In the surgical treatment of cancer the recent advances have been those of a radical nature. In many cases today, not only are attempts made to remove all of the lateral extent of a malignant lesion but also to remove the adjacent sites of metastasis. The consistently better prognosis of cancer of the colon over that of the left colon is an example of the effectiveness of more radical surgery. The treatment of cancer by wide excision is not a new principle. Certain aspects are perhaps of recent origin. These considerations include changes in the concepts of operability and inoperability and the evaluation of all factors involved. These concepts are being adjusted and corrected by surgical experience. Thirty years ago the removal of a lung or pancreas for malignancy would have been considered foolhardy. Now such operations are not considered fantastic at all, and many radical procedures have produced remarkedly gratifying results.

Lesions heretofore considered inoperable have been subjected to surgical approaches and five years survival have been noted in many cases. In general, the five years survival rates for cancers amenable to surgical excision have been increased. Admittedly in some cases, the increase has been slight. Apart from the five year survival rates, there is the surgery of palliation. Wide excision is being employed more and more for palliation. Where a shunting operation was once considered the procedure of choice in a patient who had an obstructive lesion of the gastro-intestinal tract with metastases to the liver, wide local excision is being performed. Examples are colectomies and gastrectomies in the presence of inexcessible lymph nodes metastases and small metastatic lesions of the liver. Resections in many cases are now considered more likely to insure the patient of a more comfortable and longer existence.

In evaluating the results of radical surgery, it must be emphasized that exhaustive and correct studies are difficult to make and that in most fields the surgeon who undertakes to perform radical procedures must rely upon his own judgment and integrity. Cancer surgery is both a challenge to the surgeon and to the patient. It requires courage on the part of the patient and the physician. There is however, a limit to this philisophy. The contemplation of surgical procedures of a radical nature without the evaluation of facts and a favorable opportunity for the patient's survival and comfort will lead to poor results and justifiable criticism. Mistakes will be made, but the limits of radical surgical procedures will become increasingly well defined. The concepts of operability will be altered permanently but to say that they will be definitely established is to discount the probabilities of future progress. Prognostication in patients with advance cancer is extremely difficult. Rules upon which to base decisions are hard to formulate. Nevertheless, for the surgeon who takes the position that everything possible be done for the prolonged duration of the life of an individual with an advanced maligancy, the possibilities of radical surgery for advanced malignancy must be considered.

Brunschwig[2] states that it is uncommon to encounter a patient who wishes to die no matter how pitiful his plight may appear to the objective observer. Most patients seek a ray of hope, and for the doctor who wishes to help them, radical measures offer some chance of success.

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THERAPEUTIC CONFERENCE*

The University of Oklahoma School of Medicine

SURGERY OF THE HAND

DON H. O'DONOGHUE, M.D., RAY L. LINDSAY, M.D., AND
JESS D. HERRMANN, M.D.

DOCTOR O'DONOGHUE: Gentlemen, this afternoon our topic for discussion is concerned with injuries to the hand and upper extremity. Our panel today includes Doctor Ray Lindsay of Pauls Valley, Oklahoma, Doctor Herrmann and myself. I don't know how much contact you gentlemen have had with hand injuries but certainly in my experience it is one of the most neglected fields of medicine. Hand injuries may be severely disabling. For example, one stiff finger may be worse for a person than if he had lost his whole foot, if his particular occupation requires extensive use of the hand. I feel very fortunate that we have with us today Doctor Lindsay, who has had a great deal of experience in hand injuries and I would like to call on him at this time to make any remarks that he may feel are pertinent to introduce the subject.

DOCTOR LINDSAY: Gentlemen, I would like to particularly emphasize for you this afternoon the importance of hand injuries. The person who passes the plate at the church or the lady who takes your money at the picture show may happen to have been a patient of yours at sometime, so don't be embarrassed by a finger that cannot be flexed or hand that is numb because of some nerve that you left unsutured during the golden hours when you were treating the injury. Let's consider for a moment a few fundamental principles in treatment of hand injuries. The first thing that you must do, and you must keep it in mind all the time in your original assay of the wound, is to keep it clean and not add to the contamination by an open mouth, breathing, or as Doctor Koch has aptly said, "spitting in the wound." Naturally in any severe injury of the hand or any other part of the body the entire patient must be considered, as you well know. Hemorrhage and shock are frequently present to some degree and they may be of very great degree. When you see this original injury look quickly with a mask over your face, cover that wound and often without looking at it again you may get a very good estimation of the degree and the extent of that injury while this patient is being treated otherwise for shock.

In the diagnosis of the extent of the injury a fundamental knowledge of the anatomy involved is absolutely essential. I would advise you before you start practicing, in your residencies, in your internships, tonight even, to review and constantly review the anatomy of the structures of the hand. This is such an intimately connected set of bones and ligaments and tendons and nerves, that to deny function of one will in time alter the function of the entire hand. In assaying the extent of the injury, correlating the location of the wound with your anatomical knowledge of the possible structures involved, will give you a pretty good idea of the structures most likely to be injured.

If the injury is at the wrist naturally the first things that you think of are tendons and nerves, the blood vessels will be obvious if there is a serious bleeding. If the hand is injured anywhere on the palmar surface, the tendons are again considered primarily. Adjacent to the tendons and on the volar surface of each flexor tendon of the palm are digital nerves, which Doctor Herrmann will very likely bring up. Remembering your anatomy will recall to mind that the digital nerve lies to the volar side of the veins and arteries and hence is likely to be the first thing that the knife will hit in your incision. In your diagnosis of the injury there are a few points about the pin-prick test for nerve sensation that I should like to emphasize. In the traumatized hand be very careful about deciding that this nerve is cut because there is a numbness of trauma, that frequently will hide the numbness of a cut

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nerve. Sometimes this will continue for a long period of time maybe as long as six hours, so you must be very careful and very accurate in your pin-prick sensation test of that particular nerve branch.

In testing for nerve function, if your injury is above the wrist, always remember to have them abduct their fingers and adduct their fingers; test the lumbricales by flexion of the entire finger with the digits straight; test apposition of thumb to fingers; test the flexors, the short flexor of the thumb particularly, if the injury is at the wrist, because the motor branch of the median is the only motor nerve of any diagnostic significance in the traumatized hand. If you have decided surgery is necessary, remember an advice that Doctor Koch used to give that came from Doctor Kanavel, "don't operate on a man or rush him to surgery if he has a fast pulse and a cold nose," that would seem to be rather ambiguous for hand surgery and yet the severe associated trauma that you will find in some of your patients with hand injuries should make you cautious, remembering your patient as a whole, always. In the care of the wound let us assume that we have the patient in surgery. Don't further contaminate a wound that is already dirty, wear masks, caps and gowns and gloves and remember in your surgery of the hand, repair it under general anesthesia. There are very few places in the hand that definitive surgery or repair in surgery can be done under local anesthesia or regional block. The general anesthetic with the blood pressure cuff and a bloodless field are of paramount importance in surgery of the hand.

You now have your patient anesthetized and you are ready to begin definitive care of the wound. Scrub this hand with adequate amounts of soap and water and don't watch the clock, scrub it until it is clean, washing out all debris. If you need to use benzene on the skin for grease it is perfectly all right, but keep it out of the wound. Irrigate the wound with copious amounts of soapy water, wash out the soap with saline and then stop and in this bloodless field look carefully at every structure that is injured. You know the anatomy involved. Let's start from the surface in evaluating the various structures. You know from the way that this injury occurred that this man had crushing trauma. In crushing trauma you should be very careful about deciding whether the traumatized skin is viable or not. Skin as far back as ⅛ of an inch from the wound may be so traumatized and so ischemic that it will have to be removed. It should be obvious to you that you will be better able to make this decision after you have cleased the wound. Check further into the wound for loose particles, removing any that are present. Now look for any nerves that may be within the field of your operation. If you suspect from the pin-prick test that you have a nerve injury, now is the only time that this patient is going to have it repaired for the most successful results. Remove all loose tags of pale non-contractile muscle, nonviable fascia. In short make it as nearly clean as circumstances will permit.

DOCTOR O'DONOGHUE: Thank you Doctor Lindsay, I think that introduces many of the problems that one faces in dealing with injuries to the hand. I would like to call on Doctor Herrmann now to discuss some of the neurosurgical aspects of hand injuries.

DOCTOR HERRMANN: Too often, I think, when I am talking before the student body I have the feeling that they have the impression that if you have a neurosurgical lesion one should simply put the patient in the ambulance and send them to Oklahoma City where we can look after them. This is not true of course and in injuries of the hand with neurological lesions, the neurosurgeon is certainly not the man to care for the wound. In fact, as Doctor Lindsay has said, the man that undertakes the repair of the hand must take full responsibility for the entire procedure. There are few additional points that I might add that will help you in your analysis of the extent of the neurological injury to the hand. As Doctor Lindsay has said, sensory function particularly of the digital nerves is best checked with the pin-prick test. The motor functions of the three major nerves involved however are best evaluated by the three following tests which can be quite helpful. For the Ulnar nerve, see if they can adduct their fingers and see if they can place the little finger on top of the ring finger. That is impossible if the ulnar nerve is gone. With a radial nerve that is cut low you won't have a wrist drop, in fact you won't have a wrist drop if this is cut up high because the long extensor tendons are going to elevate the wrist, but if they can extend the thumb then you are pretty sure that you do not have your radial nerve cut. For the median nerve motor function is best

tested by simply seeing if the patient can cup his hand. This of course tests the motor branch of the median nerve to the Opponens Pollicis. These are not a 100 per cent true proof tests but they are certainly good practical tests that are worthwhile remembering.

A few words about the definitive care of severed nerves at this time might be appropriate. Remember that the man that sees the nerve injury first has the golden opportunity for best results. When one has to go in later in an attempt to suture a severed nerve there is so much scar tissue and so much disruption of normal relationships that many times when a wound is healed we simply advise against further surgery of the hand. We do this because if there is considerable scar present the chance of finding these small nerve endings without creating more trauma that would disable the hand more than in the first place, is very small. Frequently in these secondary repairs there is such a further loss of sensory function that it outweighs any benefit that could be received. Now as to the problem of suturing these small nerves, remember that from a practical standpoint it takes little more than simple apposition of these tiny nerve fibers to get them to grow. Remember however, that we must do this in a bloodless field so that a blood clot will not form between the two ends and make nonconductable material between them. For suture material, we prefer split silk. Tantulum wire is fine but frequently it is difficult to see or to handle, so I prefer black silk. Let me emphasize again that in the very very small nerve simple apposition of the nerve fiber endings is adequate. When the end of your nerve is as large as a kitchen match, then you can probably put in two or three sutures through the epineurium but don't put your sutures through the substance of the nerve itself.

There are several other factors that one must remember. These factors should lend emphasis to our statements that one should if at all possible attempt primary suture of the nerves at the time of injury. First, remember that a cut nerve or a divided nerve will retract after the injury. Two, a neuroma may grow on the ends of each of these and then later when it is time to do your nerve repair you may have to sacrifice at times up to a half inch or so of each end from the nerve, which then brings up the additional problem of getting additional length of the nerve. This all serves to emphasize the point that the man who sees the original wound should take a lot more time to be sure that all the nerves that have been involved are in apposition.

DOCTOR O'DONOGHUE: Doctor Herrmann, how about the situation where there is a great deal of contamination of the wound and primary closure of the wound at this time will almost certainly result in severe infection. It has been said that sometimes in tendon repairs it might be just as well to let the wound heal and to go in later and attempt definitive repair.

DOCTOR HERRMANN: We encountered this situation during the last war. Particularly in deep wounds where there was envolvement of nerve and gross contamination. In these circumstances the nerves were sutured bringing the severed nerve endings in apposition the wound was then just lightly closed about it. Our experience in this situation was that the nerve would take and that later secondary definitive repair for closure of skin and structures was very successful.

DOCTOR LINDSAY: As a member of the same hospital unit with Doctor Herrmann during the war, in some of these extremity wounds we would often pull a sciatic nerve together knowing that we had a contaminated wound, and later definitive repair certainly was made much easier because the nerve injury had already been repaired.

A word now about contaminated wounds. This is true whether it is on the scalp, face, back of the neck, upper thigh or the hand. We have as much of a bloodless field as is possible. We have removed all foreign body and the pale ischemic muscle bundles, the loose fibrous tags have been carefully dissected away and then the question comes up and it will come up in the future, "when may I close this wound?" Remember this, that in compound wounds generally speaking among hand surgeons like Koch, Bunnell and Kanavel if you can get the wound within the first six hours and you feel that you have dealt adequately with the contaminant everything is favorable for closure. So, after you have sutured the nerves and tendons and the wound is ready for closure remove the tourniquet, ligate all spurting bleeders by using the finest silk or cat-gut to maintain a continued bloodless field. Then close the wound with the finest possible sutures. The hand and the extremity should then be splinted in a favorable position.

This brings up an additional problem in which at times we may have to compromise either the favorable position for healing of the tendon or the favorable position for the compound fracture. We will ask Doctor O'Donoghue to settle that for us in a minute. A word now on suturing of tendons. Remember that the tendon is a peculiar structure and on the back of the hand where there is a very thin sheath, if this tendon if left unsutured it is going to spread out in every direction and end up in a fiberous mat that will stay that way. So suture of the tendon is certainly important. I should also like to emphasize certain things you should remember about the sequence of events when a tendon is sutured. In the first week there is a reaction from the sheath which puts out loosely connected collagen fibers among blood cells and unorganized material. The second week this process continued until a rather large fusiform swelling is formed. Beginning in the third week is a proliferation phase of tendon cell regeneration and lessening of reaction around the sheath. During the fourth week tendon cell proliferation continues, sheath reaction subsides and lessens to allow motion. Only after the 21st day is there enough strength in the union to allow limited motion. Remember this process and time of healing and tendon repair will have a better chance of success.

DOCTOR O'DONOGHUE: Let's spend a moment now considering the Orthopedic aspects of injuries to the hand. If you have a wide-open laceration it isn't a good idea to use a lot of internal fixation on the bones. You can, and we do sometimes use plates in the presence of compound fractures but it should be avoided if at all possible. The newer method of using intramedullary fixation works in hand as well as elsewhere. One can pass Kirschner wires down the fingers, down the metacarpals, down the carpal bones and preserve some sort of normal shaped structure for the tendon and nerve repair. When applying the splint, if possible place the fingers in a relaxed position of moderate flexion. They should neither be completely flexed nor completely extended. I think that this is probably the most common mistake that is made in the hand, that is, splinting the fingers in complete extension. The hand becomes completely worthless if one has the misfortune of getting fixation or stiffness in that position, and it is very easy for them to become immobile in that position. If a hand has been placed in flexion and stiffness results it is possible to extend them later. But a hand that has been left in extension develops fibrous bands around the sides of the ligaments and joint capsule which fixes the fingers in extension and forever prevents the possibility of flexion of these fingers. The ideal position is Mason's position of function, that is with about as much flexion as you would get if the hand were placed over a moderate sized headroll. In this position there can be apposition of the thumb and fingers if stiffness does develop.

As Doctor Lindsay has mentioned, frequently multiple injuries are sustained at the time of injury to the hand. In this instance a question of priority develops, that is, which injury should be treated first. The only answer to that problem is—that any time that you have an injury either single or multiple you have to make up your mind as to the best thing to do for each particular condition and then decide which condition should be treated first. You may, for example, have a patient that is in bad condition as far as his general outlook is concerned—in a state of shock with multiple injuries — and you may feel that you shouldn't do much at the time because of his poor general condition. Yet, during that lost time you may be losing the golden hour that Doctor Lindsay has mentioned, during which you have your best opportunity to repair the serious injuries of the hand. In the last analysis it is a matter of your clinical judgment as to what injury has priority. Your judgment is based on your experience. If you make a decision and it turns out wrong there isn't much you can do about it except add it up to experience and this experience will then influence your later judgment.

STUDENT QUESTION: Doctor Lindsay, how does one decide whether amputation is necessary or not in injuries of the hand?

DOCTOR LINDSAY: In trauma to the hand where the consideration comes up for amputation let me first mention this point. The debridement of a contaminated wound in the hand like in the face should be as limited as you can possibly make it. Remove the actual traumatized ischemic tissues, of course. If a finger or fingers in the hand look like they have lost their viability, and certainly I don't think its always possible to decide at the operating table that this is a non-viable digit, it ought to come off. If it is badly contaminated and there is a com-

pound fracture through the joint—through the distal joint, and you can tell from the paleness after you have washed this digit, there is no blood response, no color response to this tissue at all, it is apparently nonviable, then I think you would be certainly justified in amputating that finger back to viable tissue leaving every bit of tissue that can possibly be saved. In other words, be as conservative as possible. If there is a question in your mind of viability and you have done the other definitive measures that we have mentioned, then put this hand with a fluff dressing in a position function opposing the little finger towards the thumb like Doctor O'Donoghue said, the digits relaxed in partial flexion so that your collateral ligaments will be under slight tension. Bind the hand with a snug elastic bandage and then wait and observe the patient. It is always possible to go in and do further amputation later. The question of inadequate circulation because of reflex vasospasm enters in here. I should like to ask Doctor Herrmann for comments about Stellate ganglion block in this situation in an effort to improve circulation in the affected extremity.

DOCTOR HERRMANN: In any traumatic injury there is frequently considerable vasospasm associated with actual damage to the blood vessel. It is much the same as if you have an embolism. Distal to the embolus you are getting no blood supply at all, but proximal to the embolus you have spasm of the blood vessel which is decreasing the blood flow considerably. There is an article written, I believe, in 1945 by Doctor Murphy in the *Annals of Surgery,* describing a very simple method of stellate ganglion block. It is done at the level of the cricoid cartilage at the mid-point of the clavicle. You simply enter with your needle hit the sixth vertebral body and stop when you strike bone. You don't go through any vital structure although I would advise you to look up your anatomy on this point. The procedure is fairly simple. During the war Doctor Murphy reportedly did this procedure frequently using an ordinary spinal needle. Untrained persons did them and in spite of the difficulties they produced a Horner's syndrome in 95 per cent of the cases which indicated block of the stellate ganglion. So, you can see if one gets 95 out of a 100 good results from untrained personnel that the procedure is actually relatively simple.

The effect that you should get on a normal extremity or one in which there is a marked element of vasospasm is: 1) dilation of the veins of the hands that you can see. 2) Marked increase in warmth of the hand. 3) The skin warm and dry. There are also other side effects—the pupil becomes small, there is relative enophthalmos and a narrowing of the palpebral fissure. This procedure can be repeated as often as necessary, and I think that it saves a great number of hands. The marked increase in blood supply to the affected extremity improves the chances of healing in the affected extremity. There has been one death recently reported in the *Journal of American Medical Association* from this procedure. However, since so many of them have been done and only one death, it is a relatively safe procedure. Use about 10 cc. of a two per cent novocain solution. The same procedure can be done for the foot and lower extremity using a lumbar symphatic block.

DOCTOR O'DONOGHUE: I am happy that you have mentioned this point Doctor Herrmann. The problem of causalgia, reflex sympathetic dystrophy, persistent vasospasm, that occasionally develops following trauma to an extremity is a very troublesome problem. Frequently it follows a simple Colle's fracture or a sprained wrist. The x-rays show excellent healing of the bone and you can't understand why the hand is cold and clammy, why the patients complain of pain and why they can't use their fingers. In our experience stellete ganglion block in this circumstance may provide marvelous results. Frequently the block has to be repeated but on many occasions a single stellate ganglion block will completely relieve all symptoms.

We can't hope to cover all the aspects of injuries to the hand in our discussion today, there are a few additional points that I should like to bring out at this time. First, I should like to repeat Doctor Lindsay's word of warning about the hand. You can't be casual in any injury of the hand. It is so easy to overlook serious injuries to the hand. I frequently have had the experience of people coming to my office with a hand that is entirely numb with nerves or tendons obviously gone. The usual story is that a few weeks or months before, he had sustained a superficial laceration of the hand, gone to a hospital emergency room and somebody sewed up the skin. Then in the following month or so the severe symptoms developed. When a patient comes to you in that condition it is a difficult problem and a certain

amount of permanent disability is almost sure to result. Remember that if you get a laceration of the palmar side of the hand, fingers are usually flexed at the time of injury, and the flexor tendons are usually tight across the joints. The slightest nick in the skin by a sharp pointed knife may cut the tendon half-way or two-thirds across and not be apparent to a doctor who just casually examines the injury. When you have the patient move his fingers it is important to notice whether the finger tips move or not! The profundus tendon may be completely servered through a relatively small incision. The best way to avoid mistakes of this sort is to have the patient put the hand through a complete range of motion and carefully observe this. Broken fingers which seem to be a relatively minor accident frequently result in severe disability. Your patients will be grateful to you for good results and very unhappy about poor results. So you should be extremely cautious when treating simple fractures of the finger.

Let this then serve as a word of warning to you all, particularly when you are residents and interns for that is the time when you will see most of this sort of injury. Don't be in a rush in the middle of the night and simply sew up a laceration of the skin of the hand, only to be embarrassed some weeks or months later to find that you have sewed the skin over a lacerated tendon or nerve. Doctor Lindsay, do you have anything further to add to injuries of the hand?

DOCTOR LINDSAY: Yes, there is one other hand injury about which I would like to say a few words. That is, burns of the hands as wounds. Any burn of the hand beyond a blister I think is a major injury. I would like to mention a few points pertinent to the treatment of this sort of injury. I think that it is probably unnecessary to repeat at this time the steps in the primary treatment of burns as wounds, other than being sure that the wound is adequately cleaned as in other wounds, working under sterile technique and treating the patient as a whole. Our best results have been obtained with plain vaseline gauze which we believe to be the simplest burn dressing. The point that I should like to emphasize however, concerns the deep second and third degree burns of the hand. If you are going to assume the responsibility of treating this wounded hand you should never allow that burn to heal by granulation. Clean granulation tissue on the back of the hand will look pretty and it may look to you as though this second degree burn would heal without scar. However, that isn't what happens. It leads to the most severe scar formation and believe me is an embarrassing object when it is sticking through the picture show window handing you change. Don't allow it to granulate. When the patient comes back for the first dressing, say seven to 10 days after your first definitive treatment, is the time for you to attack the granulation tissue. At the time of the first dressing you must be prepared to do a skin graft. A split thickness graft at this time over healthy granulation tissue will greatly reduce the amount of scar tissue that tends to develop. Healing will be very kind and you will avoid a lot of criticism.

DOCTOR O'DONOGHUE: Are there any further questions? The limitations of time prevent a complete discussion of all phases of this problem. I hope however, that we have been able to point out for you the importance of hand injuries and it is our mutual hope that what has been said here today will be of help to you in the future when faced with problems of this kind.

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1952 Annual Meeting of the Oklahoma State Medical Association

Municipal Auditorium Oklahoma City May 19, 20, 21



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ACCEPTED COUNCIL ON PHARMACY AND CHEMISTRY AMERICAN MEDICAL ASSOCIATION

RESEARCH IN THE SERVICE OF MEDICINE **SEARLE**

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President's Page

We wonder how many members of the Oklahoma State Medical Association have read the ads and the articles in the *Journal of the American Medical Association* regarding the American Medical Education Foundation. The Foundation was formed to afford financial support to medical schools, many of which are in dire need of funds. It seeks to provide private, rather than government funds sufficient to enable medical schools to continue to train an increasing number of doctors of medicine. It was formed in an effort to avoid subsidization and consequent control by the Federal government.

Individual members of the A.M.A. have been asked repeatedly to give money to the Foundation. The response from individual members over the country has been extremely small. The response from individual members in Oklahoma has been extremely small also.

A representative of the Oklahoma State Medical Association has been asked to attend a meeting in Chicago the middle of February to discuss an intensive campaign to persuade individual doctors to support this Foundation with cash money. How can he represent the doctors of Oklahoma if he does not know what they think?

Will you write to me, your president, now, and tell me some things? If you think the Foundation is fine and worthy, why have you not supported it to some degree at least? If you think the whole idea is foolish and the medical school might as well get on the government dole, please say so. If you think that organized medicine should stop trying to defeat those who are promoting socialization through some sort of socialized medicine and simply bow its head and await its fate, why not tell me that? If you feel that the contribution of one million dollars, already made by the A.M.A., taken from our dues of 25, is enough for the time being so far as doctors are concerned, tell me that. If you think that our own brass hats in Chicago jumped the gun so far as individual A.M.A. members are concerned in forming the Foundation in the first place, say so?

If you have a better idea as to how to fiight against federal control of medical education, for goodness sake let's have it. If you think government support and control of medical schools would be satisfactory, say so.

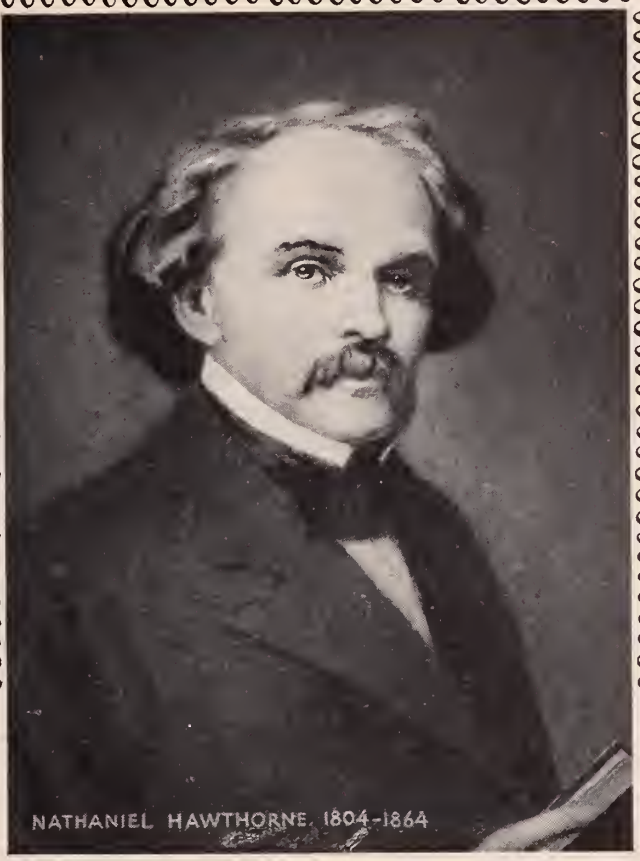
Maybe our Chicago officials have not been able to find out what 140,000 individual doctors think about this and a lot of other things. Your own president, so far has not been able to find out what 1,300 doctors think about a number of serious matters that have been mentioned on this page. How can he find out if not more than four or five members care enough about these matters to write a letter and tell him?

If a letter takes too much time and effort of the busy doctor just get on the phone and tell your Councilor. He and the other Councilors are going to have to instruct your representative who is going to this Chicago meeting so that he may correctly represent your thinking for the edification of our Chicago officials and representatives of the other states.

Come on, break down and write a letter, so that so-called representative government can really represent for once.

L. C. McHenry

President



Psychoneurotics of Genius

Hawtharne, distinguished Americon novelist, is said to have been afflicted with a psychoneurosis fram early childhood. His quiet life, whally detached fram the majar activities of the times, was largely given over to brooding solitude.

The majority of psychoneurotics have no serious mental illness, but display merely an emotional imbalance which often can be greatly improved by appropriate psychotherapeutic and sedative management. In the treatment of psychoneurosis, particularly agitated, depressed and anxiety states, Mebaral is especially useful when tranquillity with minimal hypnotic action is desired. Sedative dose: Adults, from 32 mg. to 0.1 Gm. (½ to 1½ grains) three or four times daily. Children, from 16 to 32 mg. (¼ to ½ grain) three or four times daily. Supplied in tablets of 32 mg., 0.1 Gm. and 0.2 Gm.

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Special Article

INTRODUCTION TO THE STUDENT AMERICAN MEDICAL ASSOCIATION

By Lawrence McHenry

An organization representing medical students throughout the country has long been an idea in the minds of medical educators and leaders in the medical profession. This idea became a reality when, upon the suggestion of the A.M.A., delegates representing 48 medical schools met in Chicago in December, 1950. At this Constitutional Convention, the Student American Medical Association was born. Since the birth pangs of this first convention, there have been meetings of the Executive Council of the Student A.M.A. together with the wise advice and guidance of several members of the A.M.A. to see the organization through its infancy. Now after a year the new organization of medical students has finally begun to stand on its own feet with the publication of its own *Journal* and the first National Convention of the House of Delegates. At the present time the Student A.M.A. represents 44 out of 72 four year medical schools and over 15,000 students. It is the hope of the organization that it will represent all of the medical schools in the country by next June.

What is the purpose of this organization? The Constitution states that "the object of this association shall be to advance the profession of medicine, to contribute to the welfare and education of the medical student, to familiarize its members with the purpose and ideals of organized medicine, and to prepare its members to meet the social, moral, and ethical obligations of the profession of medicine." This is the general purpose. More specifically our new organinzation will offer many direct services and activities for the medical student. Some of these are: (1) Loans and grants to students for continuing their medical education: (2) the sponsorship of scholarships, or a year of advanced study to exceptional students; (3) to arrange for summer jobs, research opportunities, field studies, special summer scientific training, and clinical conventions or seminars; (4) to provide information for the use of the A.M.A. package library and medical motion pictures, and to disseminate other information regarding medical curricula; (5) to establish some organization and placement service for the intern in cooperation with existing facilities. The greatest asset, however, will be the *Journal* which will be published nine school months of the year. This journal will give the individual student the chance to publish papers of a scientific nature or on socio-economic aspects of medicine. It will provide an outlet for news items concerning news of local chapters, national legislation and trends pertinent to the medical profession, book reviews, editorials, etc. With this association the student will have an organization and a voice by which he may express his viewpoints and ideas; he will be able to develop his knowledge of aspects other than scientific concerning the medical profession, and will be better prepared to go out into practice than the student who had gained his knowledge only from medical school and internships.

The morphology and physiology of the Student A.M.A. is similar to that of its parent, the A.M.A. The Association is composed of Academic Societies chartered at medical schools in this country approved by the Council on Medical Education and Hospitals of the A.M.A. The legislative body of the Association consists of the House of Delegates which is composed of one duly elected delegate from each academic society. The House of Delegates will meet each year to undertake study of legislation and the formation of policy. The executive authority of the Student A.M.A. resides in the Executive Council which is composed of the officers of the organization, the president, vice-president, treasurer, executive secretary and seven elected council members plus three advisors appointed by the Board of Trustees of the A.M.A. The association has nine standing committees which consider all

policy to be formulated by the organization. The committees are: Publications, Internships, Selective Service, By-Laws, Medical Education, Conventions, Medical Service, Memberships, and one on liaison with the A.M.A.

The local chapter at the University of Oklahoma School of Medicine has about 200 members out of 280 students. The chapter here in Oklahoma was first organized last spring, but started off its activities this year with a boom. The Public Policy Committee of the State Medical Association gave a dinner for the local chapter this December. The president and president-elect of the State Medical Association, along with other prominent members of the Public Policy Committee gave short addresses to introduce the students to the activities of the State Association. The local chapter would like very much to work in close relationship with the Medical School Administration and the State Association so that upon graduation, students will understand more about the practice of medicine in Oklahoma and the workings of the various State and County Associations. The programs of the local chapters will be addresses and discussions about many of the socio-economic aspects of medicine, for example: State and Federal Legislation, Specialties vs. General Practice, the problems faced in establishing a practice, and community responsibility. Not only does the Student A.M.A. have great potentialities in the organization of students on a national level, but also here on a local level in our state. It is our belief that if we students can sit in on your state and county conventions and some of the clinical sessions and in general work in close relationship with the practicing physician, we shall be able to become a little more learned in many of those things it takes years to acquire in practice. Each month of the school year your local chapter of the Student A.M.A. will publish news of its programs and plans in the State *Journal*. If any of the physicians throughout the state have any ideas or suggestions which might be of benefit to our student organization, please send them to the Local Chapter of the Student A.M.A. at the University of Oklahoma School of Medicine. Next month we will publish a full account of the meeting of the first National Convention of the Student A.M.A. in Chicago.

PRECEPTORSHIP EXPANSION SCHEDULED FOR 1952-53

The School of Medicine's Preceptorship Program for senior medical students, now in its third year of operation, has proved popular both with the students and the preceptor and associate preceptor-physicians. A policy has been followed the past two years rotating approximately one-fourth of the preceptors, making possible the appointment of a majority of those physicians desiring to serve. The average size of the senior class during the three years has been 60 students, and assigning from three to four students to a preceptor has meant that 19 to 20 physicians have had the opportunity to serve each year. For the academic year, 1952-53, however, the senior class will number 80, and since experience has shown that it is preferable to assign three students a year to each preceptor, there will be room for the appointment of six or seven additional preceptors in June, 1952.

The School of Medicine will therefore welcome applications for preceptor appointments. Any member of the Oklahoma State Medical Association living in a non-metropolitan area of the state, who is willing to assume the responsibility of arranging for a constructive program of preceptorship-type training for three senior medical students, serving 11 weeks each beginning June, 1952, is encouraged to apply. Letters should be addressed to Dr. Mark R Everett, Dean, School of Medicine, 801 N. E. 13th Street, Oklahoma City 4. If appointed, a preceptor will have the duty of providing room, board, and laundry of uniforms without cost to the student. He will have the privilege of recommending the appointment of associate preceptors in his locality to assist him in the training program. Both the preceptors and associate preceptors are made members of the general faculty of the School of Medicine for the year of their appointment.

The Committee on Perceptors, composed of two representatives each from the Alumni Associttion, the Oklahoma State Medical Association, and the Faculty of the School of Medicine, will meet in the spring to review application and recommend preceptorship appointments. In order to be assured of consideration by the committee, applications should be submitted not later than March 15.

POSTGRADUATE SCHEDULE

a two day postgraduate course in practical psychiatry will be held at the University of Oklahoma School of Medicine, Oklahoma City, Oklahoma, Monday and Tuesdty, February 25 and 26, 1952. Dr. Lauren H. Smith, Professor and Chairman of Department of Psychiatry, University of Pennsylvania, will be the guest speaker. The course is being arranged by the Department of Psychiatry of the School of Medicine. It is being designed to present practical points in the diagnosis and management of psychiatric cases. It will be of interest to all physicians in Oklahoma. Registration fee $10.00. For further information concerning this course, write Office of Postgraduate Instruction, University of Oklahoma School of Medicine, 800 N. E. 13th, Oklahoma City, Oklahoma.

A postgraduate course in the fundamentals of electrocardiography will be held at the University of Oklahoma School of Medicine, Oklahoma City, Oklahoma, March 3 through March 8, 1952. The course will be conducted by Dr. Robert H. Bayley, Professor of Medicine, School of Medicine. The instruction time will be divided between lecture and laboratory periods. Tuition $60.00. For further information write Office of Postgraduate Instruction, University of Oklahoma School of Medicine, Oklahoma City, Oklahoma.

CURRENT ACTIVITIES AT THE OKLAHOMA MEDICAL RESEARCH FOUNDATION

EDWARD C. REIFENSTEIN, JR., M.D.
DIRECTOR



This is the fourth in a series of monthly articles designed to acquaint you with the current activities at the Oklahoma Medical Research Institute and Hospital. In the first article, the physical plant was described; in the second, the operational plans; and in the third, the key scientific personnel. The object of this article is to discuss a group of eight nationally-known scientists who have been appointed as an advisory group to the Director of the Oklahoma Medical Research Institute and Hospital, and to describe the background of these individuals.

The purpose of this National Advisory Board is to meet with the Director annually and discuss the scientific policies and research activities of the Oklahoma Medical Research Institute and Hospital. The activities of the Oklahoma Medical Research Foundation have attracted nationwide interest. Scientific research in the medical field knows no state or even national boundaries. Therefore, we decided to consult with the best advisors who could be obtained regarding the many problems which face a new institution in its earnest endeavor to initiate an outstanding program in medical research. The group that has been chosen includes not only experts in the fields of cancer, heart and metabolic disorders, but clinicians, basic scientists, and administrators with experience in dealing with the problems involved in the collaboration between several scientific institutions. In addition, there are several Deans of Medical Schools, and there are individuals who represent some of the national organizations concerned with research.

A list of the members of the board and a brief sketch of their background follows:

1. Chairman of the group is *Dr. Roy G. Hoskins*, at present Consultant in Medical Science of the Boston Brauch of the Office of Naval Research. Doctor Hoskins is a physiologist who has always been particularly interested in endocrinology. He received an A.B. degree from Kansas in 1905 and a Ph D. in 1920. He has taught and conducted research in Northwestern, Ohio State, and Harvard Universities. He was Director of Research of the Memorial Foundation for Neuro-Endocrine Research in Boston and an associate in the development of the Worcester Foundation. Doctor Hoskins was Editor of the *Journal of Endocrinology* for 25 years, and the Managing Editor of the *Journal of Clinical Endocrinology* from 1942 to 1945. He has been President of the Association for the Study of Internal Secretions in 1926, President of the Society for Research in Psychosomatic Problems in 1945, and President of the Gerontological Society in 1946. In addition to studies in the field of endocrinology, he has been interested in experimental psychiatry, and in the physiology and pharmacology of internal secretions.

2. *Dr. Joseph C. Aub*, who is Professor of Research Medicine at Harvard Medical School and Director of the Medical Laboratories of the Collis P. Huntington Memorial Hospital portion of the Massachusetts General Hospital in Boston, took his undergraduate training at Harvard and obtained his M.D. degree there. He received his clinical training at the Massachusetts General Hospital and at the Russell Sage Institute of Pathology. Doctor Aub is a Consultant at numerous hospitals. He has been with the U. S. Public Health Service as a Consultant and was a member of the Unitarian Teaching Mission to Czechoslovakia in 1946. He has been Vice-President of the Neuro-Endocrine Research Foundation, and President of the Ella Sachs Plotz Foundation. He was President of the Association for the Study of Internal Secretions in 1931, and has been President of the American Association for Cancer Research. He has been a member of the Association of American Physicians, and the American Society for Clinical Investigation. Doctor Aub has done pioneer work in the field of calcium metabolism and lead poisoning. He is interested in clinical medicine, metabolism, the glands of internal secretion, the inorganic salt disturbances, and malignant disease.

3. *Dr. Edward A. Doisy*, Director of the Department of Biochemistry and Professor of Biochemistry at St. Louis University School of Medicine, received his undergraduate training at Illinois and a Ph.D. degree in Biochemistry at Harvard. He has been Mathews lecturer, Harvey lecturer, Porter lecturer, Mellon lecturer, Stieglitz lecturer, Lower lecturer, Mayo Foundation lecturer, Eastman lecturer, Miller lecturer and Loeb lecturer. He has been on the Committee on Standardization of Sex Hormones for the League of Nations. Doctor Doisy characterized the hormone preparations that are made by the ovary, and for this work he was a co-winner of the Nobel Prize in 1943. He has received honorary Doctor of Science awards from five universities. He was awarded a gold medal from the St. Louis Medical Society and given the Squibb Award of the Association for the Study of Internal Secretions. He has served as a civilian with the Office of Scientific Research and Development of the U. S. A., and on the National Advisory Cancer Council. He has been a Councilor of the Society of Biological Chemistry, later Vice-President, then President of this organization. Doctor Doisy has been President of the Association for the Study of Internal Secretions and, also, President of the American Association for Cancer Research. He has been Vice-President of the Society for Experimental Biology. In addition to his work on the ovarian hormones and estrogenic substances, Doctor Doisy has been interested in the field of metabolism and has studied insulin, blood buffers, isolation and chemical characterization of estrogenic substances, gonadotropic and thyrotropic principles and antibiotic substances.

4. *Dr. Allan T. Kenyon*, Professor of Medicine at the University of Chicago, is a clinical investigator interested in the problems of metabolic conditions in man, particularly those relating to the field of glandular disturbances. Doctor Kenyon received his M.D. degree from Rush in 1926, and trained at the Harper Hospital in Detroit. He has been on the faculty at Northwestern University, and, more recently, at the University of Chicago. Doctor Kenyon has been Chairman of the Section of Clinical Investigation, of the Committee on Growth, of the National Research Council, and a civilian with the Office of Scientific Research and Development of the U. S. A. He is a member of the Association for the Study of Internal Secretions, the Society for Clinical Investigation, and the Association of American Physicians. Doctor Kenyon has been interested in endocrinology, especially in the properties of steriods and certain pituitary principles in man with reference chiefly to anabolic processes, the urinary excretion of

androgens in health and disease, the metabolic expressions of tumors in man, ovarian and associated growth defects, and the endocrine aspects of convalescence.

5. *Dr. C. N. H. Long*, who at present is Dean of the Yale University School of Medicine, was born in England and took his medical work at McGill University in Montreal, Canada. He was Instructor in Physiology at the University College in London, Lecturer in Medicine at McGill, Assistant Professor of Medicine at Pennsylvania, and Director of the Cox Medical Research Institute for a period. He has been Sterling Professor of Physiological Chemistry and Chairman of the Department at Yale since 1936. He has been Neubold lecturer of the American College of Physicians at Philadelphia, Hatfield lecturer, and Harvey lecturer. He received an honorary M.A. degree from Yale in 1936, and an honorary Doctor of Science degree from Princeton in 1946. Doctor Long has been a member of the Committee on Research in Endocrinology of the National Research Council, a Member of the Advisory Council of the Life Insurance Medical Research Fund, a civilian with the Office of Scientific Research and Development of the U. S. A., a member of the Scientific Advisory Board of the U. S. Public Health Service, and a Consultant of the Army Institute of Pathology. He was President of the Association for the Study of Internal Secretions in 1947. Doctor Long is a member of the Association of American Physicians and of many other scientific societies. He has been interested particularly in studies on exercise in man, the functions of the hypothalamus, the physiology of the endocrine system, and the metabolism of shock.

6. *Dr. J. Murray Steele*, who is Professor of Medicine at New York University, received his undergraduate training at Harvard and his M.D. degree at Hopkins. He had his clinical training at Baltimore City Hospital and the Johns Hopkins Hospital, and later at the Billings Memorial Hospital in Chicago. He served for a time as a research worker in the Rockefeller Institute, and for the past 11 years has been Director of the Third Medical Service of Goldwater Memorial Hospital in New York City. He has been a civilian with the Office of Scientific Research and Development of the U. S. A., and also served in the U. S. Navy. He is a member of the Society for Clinical Investigation, the Association of American Physicians, the American Heart Association, the Harvey Society, and the New York Academy of Medicine. Doctor Steele has been interested in rheumatic heart disease, the physiological nature of fever in heart disease, respiratory regulation, arteriosclerosis, and the aging process.

7. *Dr. C. J. Van Slyke* is Director of the National Heart Institute of the National Institutes of Health at Bethesda, Maryland. He obtained his medical training in the University of Minnesota and then served as a medical officer in the U. S. Public Health Service for a number of years, with posts in Washington, D. C., Illinois and New York City. He was Assistant Chief of the Venereal Disease Division in Washington, D. C., then became Chief of the Division of Research Grants and Fellowships of the National Institutes of Health. Doctor Van Slyke has been head of the National Heart Institute since 1948. He has been interested in venereal disease, sulfonamide and penicillin therapy in gonococcal infections, and cardivascular diseases.

8. *Dr. Stafford L. Warren*, who is Professor of Biophysics and Dean of the Medical School of the University of California, at Los Angeles, had his undergradnate training in California and took his M.D. degree there. He had clinical training in Johns Hopkins Hospital and in the Massachusetts General Hospital in Boston. He was a Rockefeller Fellow in Europe in 1926. He was an Assistant in Radiology at the Massachusetts General Hospital, then Assistant Professor of Medicine in the School of Medicine and Dentistry at Rochester, New York, and later, Professor of Radiology in this University. Doctor Warren was Director of the Manhattan District Project in 1943, and Chief of the Medical Section from 1943 to 1946. He has been a Consultant to the Atomic Energy Commission, to the Office of Scientific Research and Development of the U. S. A., to the U. S. Public Health Service, to the Veterans Administration, and to the National Research Council. He was Radiological Safety Advisor of the Bikini Tests in 1946. He served in the U. S. Navy from 1917 to 1919, and in the U. S. Army from 1943 to 1946. He is a member of the Society for Clinical Investigation, the Gerontological Society and numerous other medical groups. He has been interested particularly in fever therapy, malignant disease, industrial hygiene, arthritis, and vascular physiology.

The outstanding qualifications of these eight scientists assures that the Director will have readily available to him at all times expert advice on any of the problems which may confront him. We are proud that men of the caliber of the members of the National Advisory Board are willing to give their time and counsel to the new Oklahoma Medical Research Foundation and its activities.



Members of the National Advisory Board with Executives of the Oklahoma Medical Research Foundation.

Left to Right: Dr. C. N. H. Long, Dean of Yale University School of Medicine, New Haven, Conn.; Dr. Allan T. Kenyon, Division of Biological Sciences, University of Chicago; Dr. Edward A. Doisy, St. Louis University School of Medicine; Dr. Stafford L. Warren, Dean, School of Medicine, University of California, Los Angeles; Dr. Edward C. Reifenstein, Jr., Director, Oklahoma Medical Research Institute and Hospital; Dr. Roy G. Hoskins, Boston, Consultant in Bio-sciences, Boston Branch, Office of Naval Reserve (Chairman of the Committee); Dr. J. Murray Steele, Goldwater Memorial Hospital, Welfare Island, New York; Dr. C. J. Van Slyke, Director, National Heart Institute, Bethesda, Maryland; Dr. J. C. Aub, Massachusetts General Hospital, Boston; Mr. Hugh G. Payne, General Manager, Oklahoma Medical Research Foundation.

PASTEUR MEDICAL BUILDING OPENS IN OKLAHOMA CITY

One of the newest and most modern medical office buildings in the state is the recently opened Pasteur Medical Building at N. W. 10th and Lee, Oklahoma City.

Built at a cost of $1,250,000, the three story brick and limestone structure, has office space for 44 physicians, two dentists, two optical companies, one brace shop, one prescription shop, a general clinical laboratory and hay fever and asthma clinic and medical dispensary.

The building is equipped with year round air conditioning and an air purifier, copied from the system in the new United Nations building in New York City, which changes air every 37 minutes and removes contaminations.

Proudest boast of those housed in the building is the rosa mamor bust of Louis Pasteur encased in the appla flora marble of the main entrance. A suitable plaque of Pasteur could not be found but an expedition to a Paris mint uncovered an ancient coin bearing a likeness of the famous French scientist and it was sculptured in marble by Prof. Hans Gisler of Zurich University especially for the building.

TULSA COUNTY MAKES REPORT TO MEMBERSHIP

One of the most complete county medical society annual reports received at the Executive Office is that of the Tulsa County Medical Society for 1951.

Under the following topics, Bulletin Committee, Blood Center Committee, Cancer Committee, Clinic Committee, Community Chest Committee, Constitution and By-Laws Committee, Golf Committee, Ethics Committee, Finance Committee, Grievance Committee, Insurance Committee, Medical Credit Bureau Committee, Medical Library Committee, Military Affairs Committee, Program Committee, Public Health Committee, Public Policy Committee, Welfare Committee, and Annual Meeting Committee, the 10 page report gives complete and concise information concerning the activities of all branches of the Society Reports of two other committees, Fraudulent Practices and Finance, were given at the annual business meeting December 10.

Committee reports list the membership and duties of the committee in addition to the activities in which it participated during 1951.

COMMUNITY HONORS DOCTOR, WIFE

Sharing honors with his wife, I. V. Hardy, M.D., long time Medford physician, was recently honored by the citizens of Grant county for his 50 years of medical care and community service.

Included in the ceremonies was the presentation of a 50 Year Pin and Life Membership certificate to Doctor Hardy by F. M. Duffy, M.D., Enid.

Doctor Hardy, who is 81, began the practice of medicine at Deer Creek where he resided for nine months before coming to Medford.

The ceremony, which was a complete surprise to Doctor and Mrs. Hardy, was held in the school building with more than 500 patients of Doctor Hardy and former music students of Mrs. Hardy present. Gifts presented to the Hardy's from the townspeople included an electric blanket, gold wrist watch, and the balance in cash that was oversubscribed for the gifts—$700.

ANNOUNCEMENTS

WASHINGTON'S BIRTHDAY CONFERENCE, Oklahoma City, February 22.

OKLAHOMA ACADEMY OF GENERAL PRACTICE, Tulsa Hotel, Tulsa, Oklahoma, March 17 and 18.

AMERICAN COLLEGE OF PHYSICIANS, Cleveland, Ohio, April 21-25.

OKLAHOMA STATE MEDICAL ASSOCIATION, Oklahoma City, Oklahoma, Municipal Auditorium, May 19-21.

CHICAGO MEDICAL SOCIETY CLINICAL CONFERENCE, Palmer House, Chicago, March 4, 5, 6, 7, 1952. Complete program will be mailed upon request. In response to popular demand, the 1952 program will show an increased number of demonstrations or workshop periods in addition to the regular series of lectures.

AMERICAN BOARD OF OBSTETRICS AND GYNECOLOGY announces the election of Dr. John L. Parks of Washington, D. C., as a member and Director of the Board. Doctor Parks succeeds Dr. Joseph L. Baer, who has been Vice President of the Board for over 20 years and who has resigned.

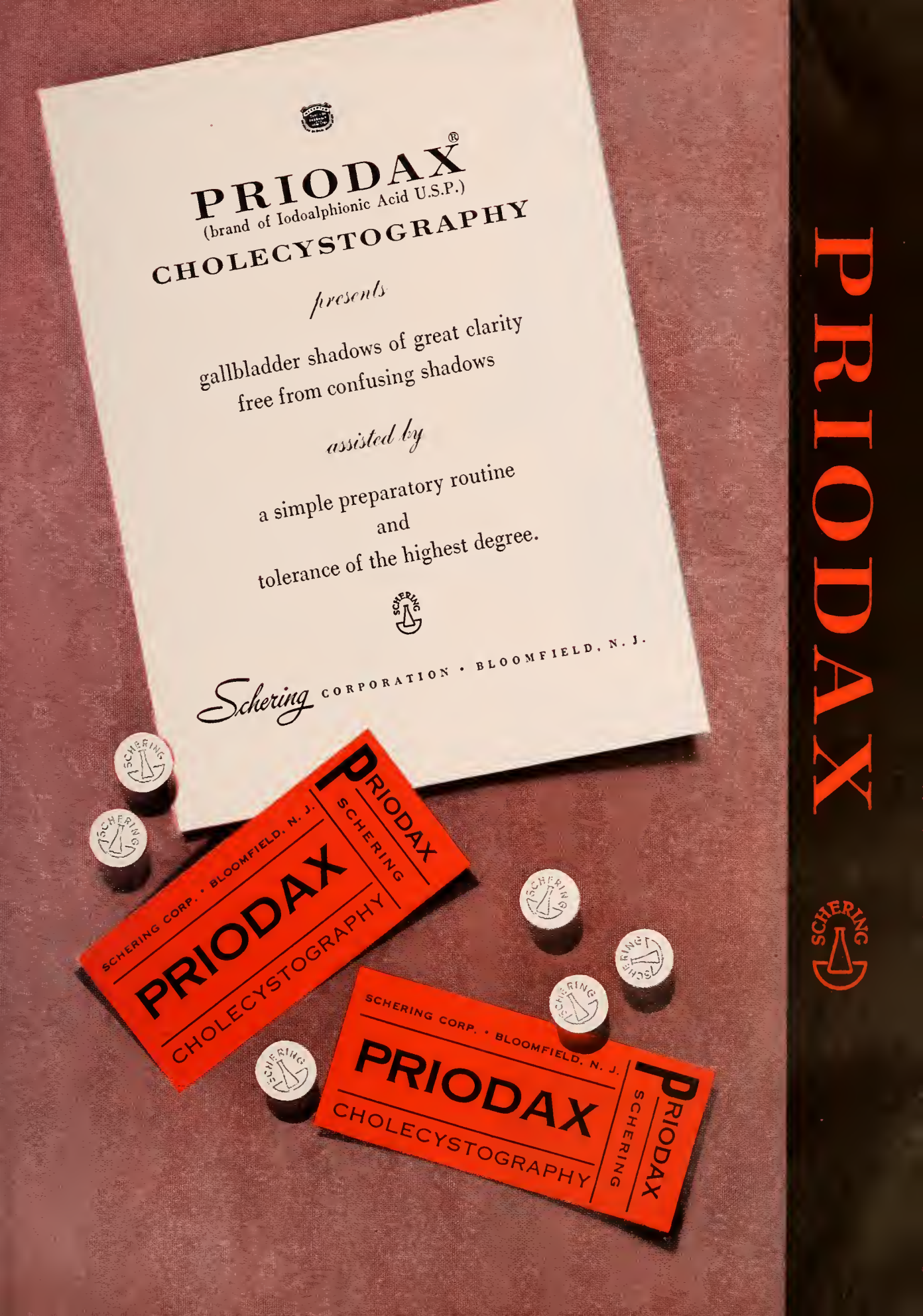
FOURTH ANNUAL NEUROPSYCHIATRIC MEETING will be held at the Veterans Administration Hospital, North Little Rock, Arkansas, February 28 and 29, 1952. In addition to many well known guest lecturers who will participate in the scientific sessions, there will be approximately 10 clinical demonstrations and 30 technical exhibits. There will be no registration fee. Further information may be obtained by writing Dr. Edwin S. Chappell, Director of Professional Education, Veterans Administration Hospital, North Little Rock, Arkansas.

WRITES FROM JAPAN

Capt. Richard F. Shriner, Jr., formerly of Hobart, writes from Japan that he has recently been transferred from the 279th General Hospital at Osaka to the 40th Infantry Division in Sandai, Japan, where he is orthopedic consultant for the division. He received the Korean Service Medal for his work at the 279th General Hospital where all the work was with Korean casualties. His address is: Capt. Richard F. Shriner, Jr., 0-447565, 115 Medical Bn., 40th Inf. Div., APO 6, c/o Postmaster, San Francisco, Calif.



F. M. Duffy, M. D., Enid, and I. V. Hardy, M.D., Medford (right), view Doctor Hardy's Life Membership Certificate.


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BOOK REVIEWS

STATISTICS FOR MEDICAL STUDENTS and Investigators in the Clinical and Biological Sciences. Frederick J. Moore, M.D.; Robert G. Knowles, M.A.; Frank B. Cramer, B.A. 113 pages with many illustrations. The Blakiston Company. 1951.

This is a concise presentation of the concepts of variation and probability which are the fundamental bases of statistics.

Chapter I deals with variation and the normal curve of error; the second chapter is devoted to fitting the normal curve of error to the data; Chapter III deals with sampling distribution and tests of significance; the fourth chapter has to do with the problem of non-normal distributions, and the fifth chapter deals with the general aspects of the design of experiments and presentation of results. The appendix includes (A) Summary and page index of methods for numerical calculations, (B) Calculation of normal equivalent deviates and (C) Numerical tables.

This is a very excellent book presented in a clear, straightforward manner which is concerned chiefly with providing the student with a grasp of the fundamental concepts and philosophies of statistics. The practical importance of such knowledge is emphasized since it is essential to the student who daily deals with measurement and evalnation of quantities.

All students and investigators in medicine and its basic sciences should be familiar with the contents of this book.—John M. Moore, Senior Student, University of Oklahoma.

PEPTIC ULCER, American Gastroenterological Association, David J. Sandweiss, M.D., F.A.C.P., Editor, W. B. Saunders Company, Philadelphia, 1951, 790 pages.

This excellent book is a fine example of how an organization devoted to a specialty can utilize its knowledge and diffuse its information.

This treatise is written by 77 experts in their respective fields and covers all aspects of peptic ulcer including not only practical anatomy and physiology, diagnosis, treatment, complications but also a section on surgery.

There is an excellent chapter on pre and post-operative care. Due to the fact that many authors have written chapters there is necessarily some repetition but this often adds rather than subtracts to the book's completeness as the repetitive statements are not always in agreement thus reflecting the present lack of accurate knowledge in respect to certain phases of the problem.

This organized wealth of information is written in a concise manner throughout and unnecessary details are avoided thus making it a recommended reference for the non-specialist as well as the specialist.

There is an excellent chapter on the commonly used drugs and the author is to be commended for using the trade names as well as the chemical names. This certainly increases the usefulness of the information.

One might have expected such a comprehensive book to have included a short chapter on post-bulbar ulcer but there are only a few casual references to this condition. Perhaps this is as much as the editor felt it deserved.

It is regrettable that a resume of the full report on

MEDICAL SOCIETIES AROUND THE STATE

Okfuskee County

L. J. Spickard, M.D., was named president of the Okfuskee County Medical Society when the group met recently in Henryetta. Other officers elected were W. P. Jenkins, M.D., vice-president; Charles R. Reynolds, M.D., secretary-treasurer; and Norman E. Gissler, M.D., censor. John A. Bransfield, M.D., was elected delegate.

Seminole County

Homer Marsh, M.D., associate dean of medicine at the University of Oklahoma School of Medicine, was guest speaker at a recent meeting of the Seminole County Medical Society.

Northwest Counties

When the Northwestern Counties Medical Society met recently at Fort Supply, the program was presented by Members of the Oklahoma Society of Neurologists and Psychiatrists and members of the State Board of Health.

Officers were also elected for the coming year. They are: Frank E. Flack, M.D., President; J. J. Smith, M.D., Shattuck, vice-president; and James C. England, M.D., secretary-treasurer. Delegates elected are M. H. Newman, M.D., and J. L. Duer, M.D.

LeFlore-Haskell

1952 officers of the LeFlore-Haskell Medical Society are G. M. Hogaboom, M.D., Heavener, president; C. S. Cunningham, M.D., Poteau, vice-president; J. R. Rigual, M.D., Wister, secretary-treasurer.

Rogers-Mayes

E. H. Werling, M.D., outgoing president of the Rogers-Mayes County Medical Society, entertained the society at a turkey and ham dinner at the last 1951 meeting.

New officers elected are M. E. Gordon, M.D., Claremore, president Warren G. Gwartney, M.D., Pryor vice-president; and W. D. Anderson, M.D., Claremore, secretary-treasurer.

Tulsa County

Marshall O. Hart, M.D., is the 1952 president of the Tulsa County Medical Society. 1952 officers elected at a recent meeting are: John G. Matt, M.D., president-elect; W. D. Hoover, M.D., vice-president; Paul T. Strong, secretary-treasurer; and Walter E. Brown, M.D., and J. D. Shipp, M.D., delegates. Named to life membership were Thomas B. Coulter, M.D.; Robert E. Lee Rhodes, M.D., and Silas Murry, M.D.

Creek County

P. K. Lewis, M.D., Sapulpa, was named president and D. L. McAllister, M.D., Bristow, was elected vice-president of the Creek County Medical Socitey for 1952. W. M. Hindman, M.D., Sapulpa, was elected secretary-treasurer.

Custer County

President of the Custer County Medical Society for 1952 is Paul Lingenfelter, M.D. New secretary is Curtis B. Cunningham, M.D.

the status of vagotomy was not complete in view of its equivocal status.

This is an exceptionally good bibliography at the end of each chapter.

The index in general is good yet some difficulties may be encountered in using it.

The American Gastroenterological Association is to be congratulated for this worthy endeavor and the book's editor and associate editors deserve a share of the kudos.—Minard F. Jacobs, M.D.

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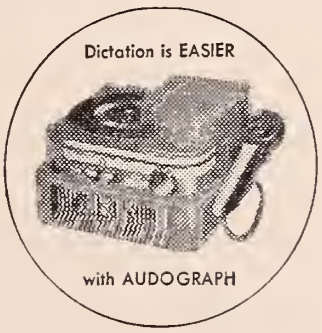
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OBITUARIES

K. M. DWIGHT, M.D.
1866-1951

K. M. Dwight, M.D., 85, pioneer Muskogee physician, died suddenly at his home December 10. Doctor Dwight, who was a native of New York, came to Muskogee in 1908. He is survived by two brothers-in-law and one sister-in-law.

A. M. MIXON, M.D.
1866-1951

A. M. Mixon, M.D., 85, Spiro physician for more than 50 years, died November 28 in a Talihina hospital where he had been ill for several months.

Survivors include his widow of the home, three sons, one daughter, a step-daughter, and 11 grandchildren.

ROBERT McHENRY CALEB, M.D.
1860-1951

Robert M. C. Hill, M.D., McLoud physician and retired Methodist minister, died Thanksgiving day.

Dr. Hill was born June 19, 1860 at Prospect, Ohio. He was graduated as an M.D. from the Chicago School of Medical Surgery in 1883, later graduating from the Toledo Medical College and received his master's degree in medicine from the Ohio Normal University, Ada, Ohio, and was awarded a doctor's degree from the Chicago School of Medicine in 1890. He practiced in McLoud until 1914 when he entered the ministry. He received his Doctor of Divinity degree from Taylor University, Upland, Ind., in 1922. He held pastorates at Ada, Talihina, Hartshorne, Coalgate, Prague, Asher, Kiowa, Spiro, Afton and Wright City before he retired and returned to McLoud.

He was well known for his community service, including church, lodge and medical activities.

GUY CLARK, M.D.
1874-1951

Guy Clark, M.D., 77-year-old retired Sulphur physician, died November 22 following a nine day illness.

A resident of Sulphur for the past 11 years, Doctor Clark formerly lived in Milburn where he practiced for more than 45 years. He was a member of the Presbyterian church, and the AF and AM Blue lodge at Milburn, the Consistory at McAlester, and the KCCH at McAlester, and a member of the India Temple of the Shrine in Oklahoma City.

Survivors include the widow of the home, two sons, one daughter, three brothers and one sister.

RESOLUTION

Whereas, the passing of Doctor J. H. Humphrey has been keenly felt by his colleagues of the Medical Profession, and the citizens of his community he has served with loyalty and understanding far beyond the call of his profession, and,

WHEREAS, his passing will leave a void, not only in the hearts of his family, but in the hearts of all who knew him, and,

WHEREAS, his benevolent and co-operative spirit will be missed at Medical and Civic Meetings,

NOW THEREFORE BE IT RESOLVED, that we the members of the Northwestern Medical Society, do hereby express to the relatives of Doctor Humphrey our sympathy, that we make known our sentiments and that a copy of this resolution appear in the minutes of the NORTHWESTERN Counties Medical Society, and a copy be sent to the Oklahoma State Medical Association.

Adopted this 13th day of December, 1951.

NORTHWESTERN COUNTIES MEDICAL SOCIETY
s/ M. H. Newman, President
M. C. England, Secretary

C. E. Williams
Ray J. Camp
Committee on Resolutions

RESOLUTION

WHEREAS, the members of the LeFlore-Haskell County Medical Society being mindful of their loss in the death of Dr. Aaron M. Mixon, and,

WHEREAS, the said members being desirous of recording this sense of loss, and,

WHEREAS, it is the wish of the Society as a whole that this feeling be conveyed to the wife and children,

NOW THEREFORE BE IT RESOLVED, that the members of the LeFlore-Haskell County Medical Society accept these resolutions as evidence of the deep respect in which the memory of Doctor Mixon is held, and,

BE IT FURTHER RESOLVED, that a copy of these resolutions be spread upon the minutes of the Society to be preserved in perpetuity of the memory of Doctor Mixon, and,

BE IT FURTHER RESOLVED, that a copy of these resolutions be sent to the family as an expression of our, the Society's, deepest sympathy.

s/ N. K. Williams, M.D., President
G. M. Hogaboom, M.D., Secretary

Poteau, Oklahoma
December 7, 1951



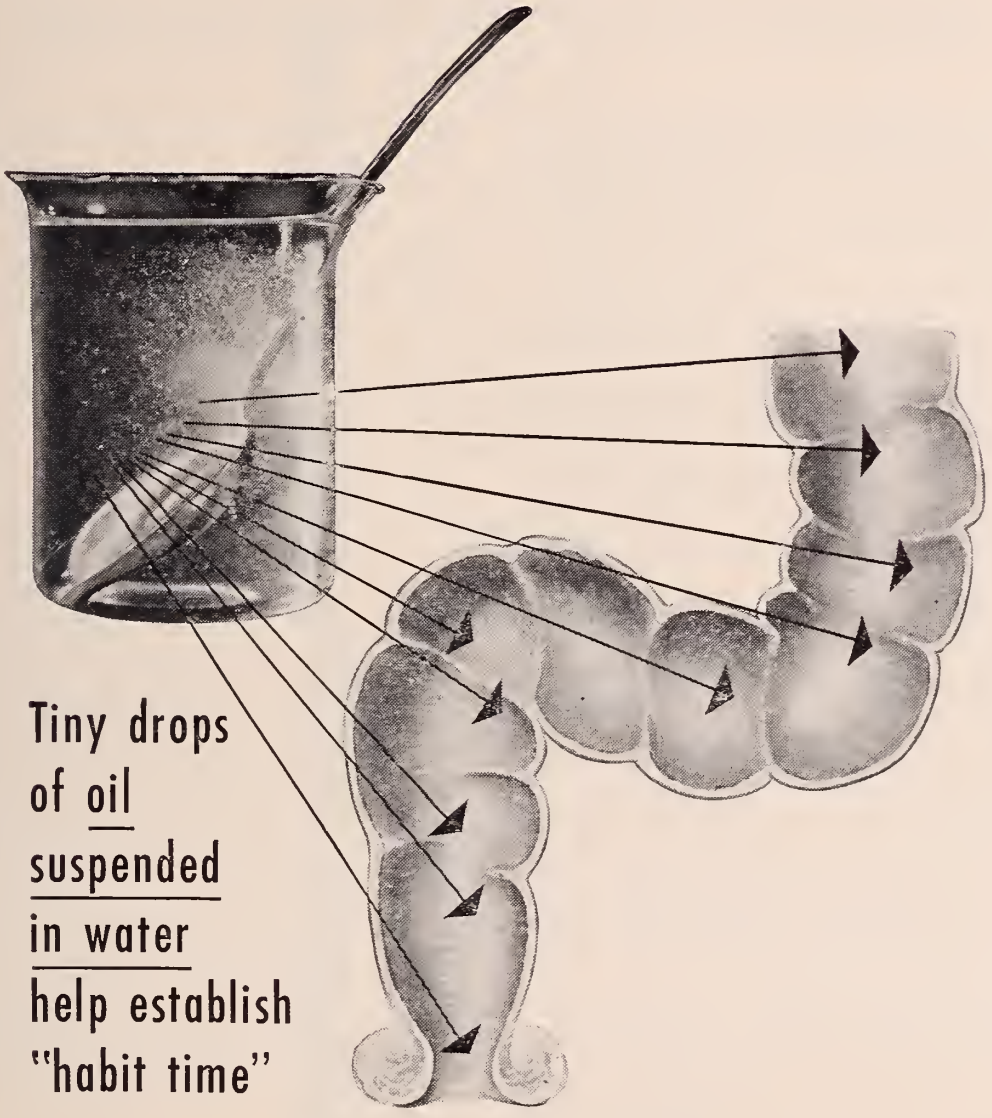
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OKLAHOMA DEFENSE BLOOD CENTER NOTES

J. R. B. BRANCH, M.D.
MEDICAL DIRECTOR

The response to the nationwide appeal for blood has been extraordinary, and during the month of November, all over the country a total of approximately 80,000 pints were collected. Thsi has overtaxed the facilities of the processing laboratories to such an extent that we have all been asked to limit our collections for the time being to keep within their facilities. This has meant that in Oklahoma we have had to limit our recruitment of prospective donors to a number sufficient to meet our quota, which is at present 3,333 pints per month. Consequently, a number of groups of individuals have been rather disappointed that they were unable to give blood now. We have tried to make it clear that this slow-down is temporary and made in an effort to give a regular and sustained production. Those who cannot give blood now will certainly be called upon a little later. We expect the need to continue month by month and should be adequate to meet all the needs of the armed forces as we see it today.

As of December 20, we have collected and shipped, 7,050 pints of blood. Until December 17, all of this was sent to a processing laboratory for conversion into plasma. Beginning Monday, December 17, we began to ship a certain amount of whole blood to be sent to Korea. The first of this was received at an operation set up in the Oklahoma Medical Research Foundation, which is our present headquarters; the donors were made up of staff and employees of the Research Foundation, Red Cross, Medical School and Hospital. One hundred forty prints were secured that day.

Alberta Webb Dudley, M.D., has been appointed Assistant Medical Director of the Oklahoma Defense Blood Center and began her duties on January 1. This, with the addition of a full-time assistant in the Central Supply Room, will complete our staff and enable us to meet our obligations as they exist today.

All the county medical societies have been requested to designate a medical advisory committee, which through its chairman will work with the chairman of the local Red Cross chapter's Blood Program committee. It is hoped that these appointments will be made in the near future and that these represenaives will be in Oklahoma City twice a year. W have had very gratifying response from the medical societies in supporting the program and in providing local medical coverage for operations in the participating counties. So far 22 operations have been completed in the participating counties, and 20 in Oklahoma City.

GRADY COUNTY REPORTS

Representing Grady County, C. W. Ohl, M.D., medical chairman of the Grady county Red Cross chapter and chairman of the Blood Donation Committee of the Grady County Medical Society, gave the following report of activities there.

November 12 and 13 the Bloodmobile Unit No. 2 visited Chickasha with headquarters at the Christian Church. During the seven hours of operation on Monday the unit collected 175 pints of blood, which was the top amount on any unit within this Red Cross district for the period of time. Oklahoma City collected 169 pints of blood in 10 hours at the WKY studio. The total for the two days was 333 pints and of the 76 rejectees, the bigger percentage were temporary, which included people with low hemoglobin, acute infections and recent operations. The group of permanent rejections included patients with heart trouble, chronic kidney disease, history of tuberculosis, active and few cases of hepatitis and malaria within the last six months.

Physicians cooperating included the following: J. H. Foertsch, A. W. Hoyt, R. G. Stoll, R. R. Coates, B. C. Chatham, H. H. Macumber, H. M. McClure, L. E. Woods, W. W. Davis and S. D. Revere. Under the direction of Mrs. Ohl, the doctors' wives and many other R. N.'s cooperated 100 per cent.

On November 21 the unit visited Verden at which time we collected 86 whole pints of blood with 24 rejected. The total for Grady County therefore was 419 pints and 519 total applications for donation.

HAVE YOU HEARD?

Gene Slagle, M.D., formerly of Oklahoma City and more recently of Holdenville, has received a naval reserve commission and is now stationed at Memphis, Tenn.

Jack Fetzer, M.D., is now Associated in practice with D. L. Benson, M.D., in Cherokee.

John McDonald, M.D., Tulsa, chairman of the O.S.M.A. Public Policy Committee was guest speaker at the Oil Capital Business and Professional Women's club recently. His topic was "Full Partnership with your Medical Profession."

Charles E. Green, M.D., Lawton, attended a meeting in Washington recently of the children's bureau which is in charge of appropriations for crippled children's clinics. He is chief of staff of Comanche County Memorial Hospital, which is co-sponsor of monthly crippled children's clinics held in Lawton under the auspices of the Oklahoma Crippled Children's Commission.

Finis Ewing, M.D., Muskogee, was recently presented a 50 year gold Masonic certificate and button at a special meeting of Muskogee Lodge No. 28, A. F. and A. M.

Dick Graham, executive secretary, spoke to the Norman Lions club on "Government and Medicine" at a recent meeting.

Gilbert L. Hyroop, M.D., has opened his offices in the Osler Annex, 1220 N. Walker, Oklahoma City.

Henry H. Turner, M.D., was guest lecturer December 14 at Veterans Hospital, Amarillo, Texas. He spoke on "Clinical Syndromes of the Adrenal Cortical Hyperactivity."

T. H. McCarley, M.D., McAlester, attended the National Public Health Conference in Washington, D.C., as an Oklahoma delegate.

Malcom Horne has opened his new offices in the Bowman building, 111 Stanley Blvd., Ardmore, Okla.

Loraine Schmidt, M.D., has assumed direction of the health services in Creek, Rogers and Wagoner counties.

Bernard Lowenstein, M.D., superintendent of the Shawnee Tubercular Sanitarium since April, 1946, has moved to Albuquerque, New Mexico, where he is Medical Administrator in the Veterans Administration.

Ernest Lachman, M.D., professor of anatomy at the University of Oklahoma School of Medicine, was inducted into the Oklahoma Hall of Fame recently.



"Premarin"—a naturally occurring conjugated estrogen which has long been a choice of physicians treating the climacteric—is earning further clinical acclaim in the treatment of functional uterine bleeding.

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*Fry, C. O.: J. Am. M. Women's A. 4:51 (Feb.) 1949

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THE JOURNAL
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OKLAHOMA STATE MEDICAL ASSOCIATION

EDITORIALS

The editors welcome letters from readers. The Journal is yours. Why not let the Editorial Board know what you think of it. Your comments, whether favorable or unfavorable, may be helpful.

MURRAY AND MEDICINE

Regardless of what Governor Murray said at the recent meeting in Tulsa, the publicity, whether true or false, fair or unfair, the response from the Governor's office is significant and should not be summarily damned by members of the medical profession without serious thought. Large sums of money are being spent to improve public relations. In part, this is necessary because certain members of the profession have entered the materialistic marathon courting well-to-do patients and large fees while cutting the poor, shunning questionable calls and refusing all night calls.

This attitude toward professional duties with a reticent or indifferent response to sick calls is responsible for some of the "jabs at doctors."

The term "public relations" with reference to medicine was unknown until society became increasingly mercenary and members of the medical profession joined in the race for the "golden quid." Forgetting that the medical profession exists for service, not for "filthy lucre" some members go too far. Nearly all the complaints coming before the grievance committee have to do with fees and strange to say, there has not been one single charge that fees are too small.

The writer has received information about a fee of $5000 for an operation usually performed for $150. The patient, well able to pay, sent a check for $1000 and said, go to —— for the balance. Perhaps the recently distributed plaque requesting a discussion before the bill is sent will help to overcome such harmful situations. On the patient's side of the ledger, the writer knows of a case where the check for services was nearly three times the amount of the fee with a voluntary expression of appreciation for services well performed.

Space will not permit all the qualifying factors in connection with medical fees. Even though we can say that false accusations are not uncommon there is convincing evidence that dissatisfaction arises through overcharging or perhaps more often through lack of understanding. In the latter case both the physician and the patient may be at fault for not frankly placing the cards on the table. It is difficult to estimate the value of medical care. Often it is much greater than the patient can or will pay. But in cases where there is the least doubt bills should not be presented without mutual understanding. An open discussion in the light of present day medical knowledge and superior service now available would help the rich to better appreciate relative values and the moderately well to do and the poor to appreciate what they receive.

Apropos relative values, a multi-millionaire had an emergency appendectomy. A close friend whose husband in addition to his regular law practice, was drawing a $5000 retaining fee from one company, said, "wasn't it awful the doctor charged $5000 for the operation?" The critical friend had not fully understood the possibility of a ruptured appendix and death versus life and well being with a fee of $5000 which was small compared to much larger fees for the safeguarding of accumulated wealth. If it is worth so much to safeguard wealth, how much is it worth to live and enjoy it?

The people know entirely too little about the value of medical care and its increased efficiency. They know even less about the cost of medical education and adequate equipment for good care. They do not think of the relative safety and increased longevity; they are unaware of the saving of time and costs through what almost amounts to magic therapy. This lack of knowledge and appreciation may be charged against a profession. Though earnestly bent on human weal, the members forget or under pressure, fail to practice the art of medicine without which neither patient nor physician can be fully satisfied.

Paid Public Relations can never take the place of the art of medicine. If we want to remain free and live on a level high above the filth that has infiltrated the executive branch of our government, we must put the grievance committee out of business through an improved patient-physician-God relationship. In other words, we must clean house and rid the closets of their skeletons.

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ANTIBIOTIC SYNGERGISM AND ANTAGONISM

It is becoming increasingly apparent that "Shot-gun" treatment of various types of pyogenic infections is not only often disappointing but when more than one antibiotic is used simultaneously may actually retard the patient's recovery. Lepper and Dowling[1] have critically reviewed their cases of pneumococcus meningitis and have found a significantly higher fatality rate in those patients treated with penicillin and aureomycin than in those who were treated with penicillin alone. Jawetz et al[2] in studies on streptococcus pyogenes and Klebsiella pneumoniae have demonstrated in vitro and in experimental animals antagonism between penicillin and aureomycin, terramycin and chloramphenicol. Jawetz et al[3] suggest that "probably chloramphenicol modifies the characteristics of the bacterial population so as to make it less susceptible to penicillin action."

On the other hand a synergistic action has been demonstrated between some of the antibiotics making their combined action against certain organisms much more effective than either alone. A patient with staphyloccus albus bacterial endocarditis was cured with streptomycin and terramycin. A synergism has been shown between penicillin and streptomycin in infections due to streptococcus faecalis and between aureomycin and dihydrostreptomycin in brucellosis.

Such accumulating data suggests in cases of serious illness where antibiotics are of necessity indicated, treatment may be started imperically but the cultures necessary for a complete study of the organism should be first obtained. Such infections are meningitis, septicemia, bacterial endocarditis, osteomyelitis, focal nephritis, or any infection in which the outcome would be doubtful without the help of antibiotics. It would also, from the evidence piling up, seem unwise to treat patients with the antibiotics when no real indication exists.

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SAFETY IN SELF SUFFICIENCY

In the trying age it is surprising how much many people expect for nothing. Even labor demands more and more for less and less with a spirit that is not in keeping with the golden rule. Capital, not always in the clear, may be equally short sighted. Cross purposes usually mean crucifixion for both parties.

Christ, Himself a laborer, offered salvation only through the "way of the cross." Having grown soft and callous we have discarded the hard way. We seek salvation through subsidy and reap damnation. When we give up the effort of making money through individual endeavor, we depart from honor and integrity and reap moral and material bankruptcy.

TO STATE ASSOCIATION ESSAYISTS

While the Journal is not obligated to publish all the scientific papers delivered at the Annual State Meeting, the members of the Editorial Board are desirous of printing every manuscript. Those who make presentations at the meeting and submit manuscripts for publication should remember that the Editorial Board is responsible to the membership for the Journal. Therefore, a critical perusal of each manuscript must determine its suitability for publication. The decision necessarily rests upon several factors. The most important are scientific merit, including clinical research, value to membership of the State Association and the quality of writing.

The true significance of the latter requirement is well expressed in the following from Dr. Richard M. Hewitt:

"To a responsible writer, the manuscript, with his name on it, is the highest product of his mind and art; as nearly flawless as he can make it, his property, rooted in his character and evidence of it. He is, moreover, scrupulous in matters of credit, use of quotation marks, accuracy of quotations, accuracy of paraphrase and accurate of reference. All this implies he can, and will, read accurately."—Richard M. Hewitt, M.A, M.D., Ass't. Prof. of Medical Literature, Mayo Foundation, University of Minnesota. Mississippi Valley M. J., 74-2, Jan., 1952.

A PARALLEL

In the golden age of Grecian culture Socrates "the incarnation of reason" reached the pinnacle of moral speculation. Hippocrates replaced magic with the science and the art and through the oath he made medicine ethical and moral. Plato, day dreaming, idealized human relations and political science. Aristotle, his pupil, turned

to earth for cause and effect and became the progenitor of all the natural sciences.

Socrates, yielding to official decree with philosophy tugging at his soul, chose death rather than exile, drank the fatal cup and vanished in the dark. Plato with his metaphysical gleam likewise passed from the scene. The scientific teachings and writing of Hippocrates and Aristotle were neglected and ultimately submerged in the Dark Ages. Even Sophocles anticipated the unhappy trend and said:

"When Reason's day
Sets rayless-joyless-quinched in cold decay
Better to die, and sleep
The never-waking sleep, than linger, on,
And dare to live, when the soul's life is gone."

For centuries the speculative spirit of Greek learning was replaced by greed for power and material progress with Rome as the dominant center.

Ultimately Augustus Caesar unconscious of his fate sat on the throne of world empire. With the nod of his head he could move the world and place distant kings in chains. It was a bitter winter for humanity, blighted by ignorance, suspicion, envy, discord, selfishness and fear. In the abscence of science and reason the *Decline and Fall* was inevitable.

Today in the United States science and reason are being treatened by similar centralization of power at the seat of government. When power becomes absolute, liberty will become obsolete and the would-be Augustus Caesar will take over. Medicine looms large in the realm of science and reason, and history shows that the regimentation of the medical profession and the people in need of medical care, has served well the obsessive Caesar, psychology which prepares the way for political coercion, *Decline and Fall.*

At least 20 civilizations have succumbed but archeological excavations for the amazement of their successors have no appeal for the American citizenry. Yet the federalization of medicine, if it comes, will give the United States a front seat on the toboggan that swiftly moves toward the point of no return where oblivion has enveloped successive civilizations in subterranean mold.

Shall we continue to be passive victims of the catastrophic trend and be jolted into a hopeless realization only by the toboggan stage of our decline or shall we reserve the trend by alert response and audible opposition to every vicious move toward the welfare state, with circumspect living, intensive education, the ultimate possible influence and the delivery of as many votes as can be mustered. Failing in this, every physician in the U. S. not already engaged in some government service, should refuse to serve under any plan that destroys the patient-physician relationship and imposes compulsion, utterly incompatible with freedom.

Most people are afraid of death but for the physician death, with an accounting in the clear, would be far better than life under coercion robbing both patient and physician of free inittiative and a great nation of its hard earned liberty.

American medicine stands among the causes worth fighting for and dying for if freedom and honor demand. It is time for us, "the people," to roll up our sleeves and see that government in the United States is "by the people' and "for the people." Fear for the safety of the body should never enslave the soul.

"NURSING GOD'S POOR"

William Osler believed there is no higher mission on earth than that of providing care for the poor. Through an awakened mass psychology, political expediency and professional indifference the medical care of the poor has largely passed into the hands of the self-seeking agencies of government.

Since charity no longer begins at home, the poor, the profession and the people at large, have suffered because the cold, impersonal functions of government have replaced the chastening influence of charity individually administered.

The physician who refuses to do his share of charity work and continues to accept the ever increasing bureaucratic brand, is selling his heritage for a mess of political pottage.

William Harvey, who discovered the circulation of the blood, gave one day a week to charity. William Withering, who speeded the circulation by the discovery of digitalis, devoted two hours a day to charity. William Osler, who taught that in medicine the heart must be employed equally with the head, devoted much time to "nursing God's poor."

SCIENTIFIC ARTICLES

CARCINOMA OF THE THYROID GLAND*

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Carcinoma of the thyroid gland constitutes only about one per cent of human cancer. Nevertheless, it is clinically more important than many more common forms of cancer for the following reasons:

(1) Approximately 90 per cent of thyroid cancers originate in pre-existing, long standing, single adenomas and can be prevented by removal of the thyroid adenomas.[1,4]

(2) The superficial location of the thyroid gland makes it possible to discover about 80 per cent of thyroid tumors relatively early in their course.

(3) The majority of carcinomas of the thyroid remain localized in the thyroid gland and homolateral cervical lymph nodes over a period of years. Accordingly, the prognosis, with adequate surgical removal, is excellent.[1]

(4) The histologic types of throid cancer that are most amenable to treatment develop predominantly during the most productive years of life, while the types with a poor prognosis are most common in older age groups.[2]

CLASSIFICATION

The classification of thyroid tumors by Warren[3] is as follows:

Benign:

(1) Adenoma
- a. Embryonal
- b. Fetal
- c. Simple
 - 1—Hurtle Cell

(2) Papillary Cystadenoma

Malignant:

GROUP I: *Low or Potential Malignancy*

1. Adenoma with blood vessel invasion.
2. Papillary cystadenoma with blood vessel invasion.

GROUP II: *Moderate Malignancy*

1. Papillary adenocarcinoma (50 per cent all malignancies)
2. Alveolar adenocarcinoma
3. Hurthle cell adenocarcinoma

GROUP III. *High Malignancy*

1. Small cell carcinoma
 - a. Compact type
 - b. Diffuse type
2. Giant cell carcinoma
3. Epidermoid carcinoma
4. Fibrosarcoma
5. Lymphoma

CLINICAL FEATURES

The usual clinical features of thyroid cancer are well known. The following, however, deserve emphasis:

(1) Tumors of high malignancy (Group III) are, fortunately, rare (comparatively 20 per cent). In general, they are characterized by rapid growth, extensive local invasion, early metastasis to distant sites and poor prognosis.

(2) The types of carcinoma which are most common and which have the best prognosis (Groups I and II) may be indistinguishable, clinically and grossly, from benign adenomas. These represent 80 per cent of thyroid cancer.

(3) Cancer occurs rarely in diffusely enlarged thyroids, in about 10 per cent of multinodular glands, and in approximately 25 per cent of glands which present a single, discrete, nodule.[4]

(4) In a small percentage of thyroid carcinoma, the primary tumor is so small that it is not palpable and the metastatic implants in the homolateral cervical lymph nodes constitute the only clinical evidence of the tumor.[5,6] Formerly, failure to understand the true nature of such cases led to the erroneous conception of "lateral aberrant thyroid tumors."

(5) About 15 per cent of thyroid tumors entend substernally and, therefore, may not be palpable.[1]

(6) Rarely, distant metastasis to the lungs, bones, liver, kidneys and brain may be the initial manifestation of thyroid cancer.

*Presented before the General Session at the Annual Meeting of the Oklahoma State Medical Association, May 23, 1951.

(7) The incidence of cancer of the thyroid is approximately two females to one male.

TREATMENT

The proper treatment of a patient with a solitary mass (which may or may not be carcinoma) within a lobe of the thyroid gland is complete removal of the involved lobe and isthmus. If the tumor extends beyond the capsule of the gland or, if metastasis to the cervical lymph nodes is suspected or proved, the operation should include removal, by block dissection, of the lobe and isthmus of the gland, the overlying infrahyoid muscles, and lateral and supraclavicular lymph nodes with adjacent structures such as the internal and external jugular veins and the sternocleidomastoid muscle. In more advanced cases it is often necessary to include dissection of the submaxillary triangle and the superior mediastinum. Extension of tumor into the opposite lobe of the thyroid necessitates complete removal of the gland and bilateral neck dissection. In such instances, the internal jugular vein should be preserved on one side.

Radiotherapy, in its various forms, is useful primarily as palliative treatment in incurable cases and secondly, as an adjunct to surgery. With the availability of radioactive iodine we now have a method for administering radiotherapy of a select type in a small group of cases.

Functioning thyroid tissue's natural affinity for iodine[7] is the basis for using radioactive iodine in various thyroid diseases, both as a diagnostic tool and as a method of treatment. Radioiodine is characterized by its chemical identity to normal, stable iodine (the thyroid gland cannot distinguish between radioactive and stable iodine atoms) and by the radiations it emits (beta particles and gamma rays).

As a tracer in cases of thyroid carcinoma, a dose of approximately 1 millicurie (1000 microcuries) is given orally, on an empty stomach, while the patient is on an iodine-free diet. The 48 hour urinary output of radioiodine is compared with normal figures to ascertain the degree of function of the gland. Normal excretion values range from 44.0 to 87.8 per cent of the administered dose at 48 hours. A radiation survey of the entire body is made to determine the sites of functioning metastasis or radioiodine localization. This survey is done by placing a lead-shielded directional Geiger-Mueller tube over the various parts of the body and counting the number of gamma rays entering the tube in a convenient unit of time. Areas which exhibit a relatively increased number of counts represent foci of increased radioiodine concentration.

The usefulness of radioiodine in the treatment of metastatic thyroid cancer stems from its selective localization in metastatic areas[8] and the beta particles emitted by the isotope. To a large degree, the destruction of neoplastic thyroid tissue by radioiodine is the result of bombardment of the various malignant elements by the beta particles of the iodine. For this reason, if radioiodine therapy is to be fully effective, it should be utilized in those cases where there is a homogeneous distribution of the isotope within the tissue. Generally speaking, this situation is attained when the pathological structure exhibits a follicular pattern, with an orderly cellular arrangement, and the presence of colloid within the follicles.[9] The rule, however, is subject to many exceptions. Therefore, there has arisen the technique of autoradiography[10] which is the final arbiter in cases of question as to whether radioiodine therapy will be effective. In this procedure, a tracer dose of I-131 is administered 12- to 24 hours previous to surgery. The radioiodine-containing gland is removed and sections, specially prepared, are placed on slides coated with special photographic emulsion. The radiations from the radioactive iodine, which has become an integral part of the thyroid tissue, will cause blackening of the photographic emulsion. The pattern of the radiograph thus produced may be correlated with areas seen in normal histological sections, the areas of blackening corresponding to radioiodine containing structures.

Where surgery no longer offers an avenue of attack on thyroid carcinoma with metastasis, treatment with massive doses of I-131 is expedient.[01] A total dose of 200 to 300 millicuries is not unusual. From the point of view of greatest radio-biological response, relatively low doses, given at frequent intervals, would be the desired regime. Thus, a dosage program of 25 millicuries of I-131 per dose, given once or twice a week, with careful observation of blood picture and clinical apperance of the patient, constitutes a reasonable method of attack on responsive thyroid tumors. Unfortunately, only about 15 per cent of thyroid carcinomas concentrate radioiodine[12] in sufficient amount for the isotope to be of great benefit in controlling the disease.

Although we know of no reported incidence of carcinogenic action of radioiodine,

such a danger must be kept in mind. Especially in children, adolescents, and adults of child-bearing age it should be used with caution.

CASE REPORT

Mrs. A. B. A., a 52 year-old white woman was seen by the senior author in March, 1949. One year previously, she had discovered a small painless mass in the right side of her neck which had doubled in size. On examination, there was a round, mobile, nontender mass two cm in diameter in the right supraclavicular fossa. The examination was otherwise not remarkable. On April 1, 1949, the cervical mass was removed. Grossly, it was thought to be a lymph node. The pathologist's diagnosis was "palpillary cystic adenoma, probably malignant." In January, 1950, another mass was noted farther posterior in the right supraclavicular fossa. It too, was removed. The pathologist's diagnosis was "benign granulomatous tissue, probably arising from an old sebaceous cyst." Subsequently, other masses appeared on the right side of the neck. One of these, in the apex of the posterior triangle was removed in June, 1950. A diagnosis of "palpillary adenocarcinoma of the thyroid gland" was made.

The patient was admitted to University Hospital on July 22, 1950. On examination, there were two scars over the right clavicle and a more recent scar in the apex of the posterior triangle on the right. There were several round, firm, mobile nodes up to 1.5 cm in diameter in the right supraclavicular fossa and one relatively fixed node beneath the sternocleidomastoid muscle at the level of the thyroid cartilage. Physical examination was otherwise not remarkable. Urinalysis and blood count were negtive. X-ray and fluoroscopic examinations of the chest disclosed a round shadow with a smooth border in the right upper mediastinum which displaced the esophagus to the left but did not encroach upon the lumen of the trachea. The mediastinal mass was thought to be a substernal tumor of the thyroid gland. Roentgenograms of the skeleton did not reveal any abnormalities.

On July 25, 1950, a tracer dose of 909 microcuries of I-131 was administered. Of this amount 59.4 per cent was excreted in the urine in 24 hours. A complete body survey with the directional Geiger-Mueller counter did not reveal any concentration of the radioiodine over the cervical lymph nodes or elsewhere except over the thyroid gland.

On July 31, 1950, a right hemithyroidectomy and lateral neck dissection was performed. The contents of the digastric triangle were not removed. At operation, the left lateral lobe and isthmus of the thyroid were grossly normal. The right lobe was largely replaced by numerous small cysts. From its lower pole, a tongue-like process extended into the superior mediastinum. The mediastinal portion was also cystic. On the posterior aspect of the lobe, just below the superior pole, there was a hard, gray-white mass 1.5 cm in diameter which proved to be the primary tumor. The pathologic diagnosis was "papillary adenomarcinoma of the thyroid gland, with metastasis to regional lymph nodes." Several nodes from the carotid triangle and posterior cervical triangle contained tumor while the nodes from the inferior deep jugular group did not.

The day before operation, the patient received 58.8 microcuries of I-131. Radio-autographs made from the specimen revealed uptake of the isotope by the normal thyroid tissue but only a slight concentration by the carcinoma. The postoperative course was uneventful. The patient was discharged from the hospital on August 8, 1950.

SUMMARY

The importance of thyroid cancer as a preventable and curable disease is stressed. Some of the outstanding clinical features of carcinoma of the thyroid gland are listed. The principles of treatment are outlined.

The role of radioactive iodine in the diagnosis and treatment of thyroid tumors is briefly discussed.

An illustrative case of papillary adenocarcinoma of the thyroid gland is presented.

From the Department of Surgery, Medical School, University of Oklahoma.

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THE MANAGEMENT OF ACUTE PERFORATED PEPTIC ULCER*

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(Preliminary Report)
MUSKOGEE, OKLAHOMA

This report is a statistical study of 85 cases of acute perforated doudenal ulcer that were seen from December, 1937, to May, 1951. The clinical records were complete except in five cases for which we had a summary covering most of the pertinent facts. The entire clinical record of these five cases was not available at this time but will be available shortly as they had been sent into the central office and were not returned to us in time for study. Sixty-six of the patients treated were in the U. S. Veterans Hospital, Muskogee, Oklahoma, and 19 came from the private practice of one of the authors.

As our past experience in the operative treatment of perforated duodenal ulcer after the first 18 hrs. had been increasingly poor with the passage of time one of the authors in 1937 adopted the principle of operative interference, with the view to closure of the perforation, only in those cases seen in the period of the first 12-18 hrs. We could see no benefit to be derived from operative interference in the patient with generalized peritonitis, consequently followed a regimen of medical treatment and surgical interference only where complications arose later necessitating that. It is to be noted that this period dating from 1937 begins with the availability of the sulfanilamides to be followed in succession by the other antibiotics of increasing effectiveness. Coincident with this, intravenous proteins became available, electrolyte and water balance became better understood and a much freer use of whole blood, through the establishment of blood banks, was made.

Of the 85 patients, 74 gave a history of previous ulcer symptoms, four gave no history of symptoms preceding the perforation and in seven cases no notation had been made. The duration of previous symptoms was from one day to 40 yrs. (Table I).

Diagnosis was not a major problem except in a few cases that were apparently leaking slowly, appendicitis, cholecystitis and one instance of intestinal obstruction. The symptoms of acute hemorrhagic pancreatitis may resemble those of a perforated peptic ulcer very closely. Both are quite sudden and dramatic in their beginning but pancreatitis was not a complicating factor in our series. Two cases of acute perforation were operated upon with a diagnosis of appendicitis and the perforation found at the time of operation. A case of acute cholecystitis was operated with a mistaking diagnosis and one case of acute intestinal obstruction was first diagnosed as an acute perforated ulcer but died of a massive hemorrhage from a penetrating duodenal ulcer. There was nothing diagnostic about the temperature range nor the white count. X-rays of the abdomen were taken in 48 cases and air found under the diaphragm in 60 per cent (Table II). The air under the diaphragm was found to be diagnostic in 69 percent of a perforation somewhere in the intestinal tract. In 31 per cent of those examined by x-ray no air was found under the diaphragm. In the other cases in which x-rays were not taken the symptoms were so characteristic that it was not thought to be necessary by the surgeon to make the x-rays nor to spend the time in doing so. Occasionally the patient was in such poor condition it was not thought advisable.

The majority of the cases came in the age group of 31-60, the largest number between 41-50 (Table III).

The white race was much in the majority being considerably out of proportion either to the relative bed capacity or the local population both being relatively six to one (Table IV).

The males far out numbered the females. In the Veterans Hospital this would be accentuated. But it was noted that in the 19 cases arising from private practice there was only one female (Table V).

During the winter months there were about one half as many perforations as in each of the other three seasons (Table VI).

*Presented before the Section of Surgery at the Annual Meeting of the Oklahoma State Medical Association, May 22, 1951.

TABLE I. DURATION OF ULCER SYMPTOMS PRIOR TO PERFORATION

No previous symptoms	4
Previous symptoms	74
No data	7
Duration of previous symptoms	1 day to 40 years

TABLE II. FREE AIR IN PERITONEAL CAVITY BY X-RAY

Examined	48
Not examined	28
No data	9
Total cases	85

	Air Present	Air Not Present	Total
Cases	33	15	48
Percent	69	31	100

TABLE III. AGE - RANGE

Decade	11-20	21-30	31-40	41-50	51-60	61-70	Unknown
No. of cases	2	13	15	26	23	4	2

TABLE IV. RACE

Total	White	Colored
85	82	3

TABLE V. SEX

Total	Males	Females
85	84	1

This follows the general experience of there being more ulcer cases presenting themselves for treatment in the spring and fall than during the other seasons of the year, although in our experience we had just as many perforations in the summer months as during the spring and fall.

All but six of the perforations occurred on the anterior surface of the first part of the duodenum. Five perforations occurred in the lower part of the stomach and some of these occurred so close to the pylorus that there was a question as to whether the ulcer was actually on the stomach or the duodenal side. There was one perforation of the jejunum occurring in a case that had previously been subjected to a gastrojejunostomy, the perforation occurring 2 cm. distal to the anastomosis. In our experience benign ulcers of the stomach are almost always on the lesser curvature and of the penetrating rather than the perforating type. This is readily understood because of the overlying attachment of the lesser omentum, the greater thickness of the stomach wall and the tendency of adherence to the under surface of the left lobe of the liver or the posterior abdominal wall (Table VII).

Sixty-two cases were subjected to surgery for closure of the perforation. The simplest type of closure was used in all cases operated upon and was used in 59 of the patients. This was occasionaly by simple suture and omentum graft but in the majority of cases was by omental graft or plug only. Three cases, because of previous history of pyloric obstructive symptoms, had more extensive procedures (Table VIII). The other procedures used were pyloroplasty, gastric resection and gastroenterostomy, one each. In recent years one of the authors has been placing a long Penfield drain up over the dome of the liver and bringing it out through a stab wound in the right loin. In those cases in which such a drain is used there is copious drainage especially for the first 24 hrs. The drain is removed by stages after one week. When this type of drainage has been instituted no patient has had to have a subprenic abscess drained.

Following operation all cases were placed on Levine tube suction with nothing by mouth until through and through peristalsis was established. In the non-operative patients the same procedure was followed from the beginning. The average of both types usually were taking food by the 5th day. If the ileus remained a Miller-Abbott tube was substituted and sometimes used in addition to a Levine tube. In one instance it was necessary to preform an enterostomy in addition.

Various complications have occurred during the convalescence of both the operated and the non-operated groups. The most frequent complication was that of a subphrenic abscess (Table IX). Various appropriate surgical or medical measures have been used as indicated in the individual case.

Table X shows the hospital stay required in the various categories of cases both in the Government and private institutions. From this it can be seen that in both hospitals the operated cases were on the average discharged several days sooner than those subjected to conservative treatment. This longer stay of the non-operated cases is to be expected as they were admitted to the hospital, on the average, much more seriously ill than those operated. (Tables XI and XII)

TABLE VI. PERFORATIONS BY MONTHS

Month	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Cases	4	2	10	11	6	8	6	7	7	9	3	5
	11		27			21			19			

TABLE VII. LOCATION OF ULCERS

Location	Duodenum	Stomach	Jejunum
Cases	79	5	1

TABLE VIII. TYPE OF OPERATION

Operative cases	62
Simple closure, omental graft or plug—simple suture	59
Pyloroplasty	1
Gastric resection	1
Gastro-enterostomy	1

TABLE IX. MAJOR COMPLICATIONS OF SURVIVING PATIENTS

COMPLICATION	OPERATED GROUP	NON-OPERATED GROUP
Subphrenic abscess	5	3
Thrombophlebitis and/or phlebothrombosis	2	1
Mechanical bowel obstruction	0	2
Huge abscess, intraperitoneal	1	2
Fistula, doudenal	0	1
Fistula, fecal	0	1
Pyloric obstruction	2	0
Hemorrhage from ulcer	1	0
Wound infection	3	—
Wound disruption	2	—
Incisional hernia	1	
Atelectasis, pulmonary		2
Totals	17	12

TABLE X. HOSPITAL DAYS

CATEGORY:	INSTITUTION			PRIVATE	
	Operated	Not operated	No data	Operated	Not operated
No. of cases: 85	45	20	1	17	2
Total days	1544	791		316	52
Average days	34.5	39.5		18.6	26

TABLE XI. CAUSE OF DEATH

CAUSE OF DEATH	OPERATED	NOT OPERATED
Peritonitis, general	1	10
Mulutiple liver abscesses	1	0
Massive hemorrhage	2	0
Totals	4*	10

*One case massive hemorrhage and peritonitis.

Of the 85 patients treated 14 died, of these 10 were not operated and four were. The 10 non-operated all died of generalized peritonitis while of the four operated upon only one died of peritonitis and that was complicated by a massive hemorrhage which was the immediate cause of death. The other three deaths among the operated cases bore no relationship to the operative procedure dying as they did from massive hemorrhage from a penetrating ulcer (2) and multiple abscesses (1) (Table XI).

TABLE XII. MORTALITY

Periods	ENTIRE GROUP Cases	Deaths	Mortality	OPERATED Cases	Deaths	Mortality	NOT OPERATED Cases	Deaths	Mortality
1937-41	19	6	31.5%	14	3	21.4%	5	3	60%
1942-46	31	6	19.3%	21	2	9.5%	10	4	40%
1947-51	35	1	2.8%	27	0	0.0	8	1	12.5%
Total	85	13	15.2%	62	5	8.0%	23	8	34.7%

TABLE XIII. MORTALITY IN RELATION TO TIME FROM PERFORMANCE TO TREATMENT

No. of hours	TOTAL CASES No.	Deaths	Percent	OPERATED No.	Deaths	Percent	NOT OPERATED No.	Deaths	Percent
6 or less	28	0	0.0	27	0	0.0	1	0	0.0
6 to 12	21	2	9.5	21	2	9.5	0	0	0.0
12 to 18	10	0	0.0	7	0	0.0	3	0	0.0
18 to 24	6	2	33.3	6	2	33.3	0	0	0.0
24 to 30	3	0	0.0	0	0	0.0	3	0	0.0
More than 30	11	3	27.2	1	0	0.0	10	3*	33.3
Unknown	6°	6	100.0	1	1	100.0	5	5	100.0
Totals	85	13	15.2	62	5	8.0	23	8	34.7

*Two of these cases moribund on admission, one died in five hours, the other within 12 hours.

°Records on these cases not available for review.

The years 1937-51 have been divided into three periods (Table XII). From this is can be seen that the mortality rate has progressively decreased both in the operated and non-operated groups. During the last period of 1947-51 there have been no deaths in the operated group and in the non-operated group the mortality has been reduced from 60 per cent in the first period, 1937-41, to 12.5 per cent in the last period. We attribute this decrease in mortality chiefly to the increasing effectiveness of the antibiotics and better understanding of electrolytic balance and a freer use of blood transfusion. All cases throughout the three periods have either been treated by or under the direct observation of either one or both of the authors.

In the group of 19 patients arising in the private practice of one of the authors there were no deaths in either the operated or the conservatively treated groups. This disparity can be explaintd by the fact that these cases were seen on the whole much earlier and in the operative period. Those coming to the Veterans Hospital came mostly from a distance and more time had elapsed since the perforation, consequently they were admitted to the hospital on the average in a much poorer condition. Several of these last were admitted in such poor condition that they lived only a few hours or a day or two after admission (Table XIII and XIV). Even with this handicap the death rate has been reduced from 60 per cent in the period of 1937-41 to 12.5 per cent in 1947-51.

Subsequent to discharge from the hospital following their treatment in this series there has been known ulcer surgery performed on seven cases, six were subjected to a gastric resection and one to a gastro-enterostomy. (Table XV).

The conclusions reached by the authors after the study of the clinical records of these 85 cases were: (1) Time is a most important factor and that practically all cases operated within the first 12-18 hrs. have survived. (2) The patients seen after this

TABLE XIV. SUMMARY OF FATAL CASES

Case No.	Initials	Age	Adm. Date	Perf. to Treat.	Hosp. Days	Cause of Death	Autopsy	Remarks
OPERATED CASES								
1	D. H.	27	12-6-37	22 hours	11	Hemorrhage, peritonitis	Yes	2 D.U., 1 bleeding
2	T. P.	44	3-7-39	?	2	Peritonitis, atelectasis	No	Gastric ulcer
3	T. E.	42	10-1-39	20 hours	5	Peritonitis	No	Duodenal ulcer
4	A.W.	47	6-8-43	9½ hours	70	Multiple liver abscesses	No	Gastric ulcer
5	N. B.	55	4-2-46	6		Hemorrhage, massive, through Levine tube, 2nd P.O. day	No	Duodenal ulcer 2 cm., perforated in hospital
NON-OPERATED CASES								
6	S. H.	49	1-14-40	No data	9	Peritonitis	Yes	Gastric ulcer
7	L. J.	46	6-24-41	No data	49	Peritonitis, empyema, liver abscesses	Yes	Duodenal ulcer
8	A. C.	53	12-31-41	No data	1	Peritonitis, hemorrhage	Yes	Moribund on adm., gastric ulcer
9	A. R.	47	7-9-43	120 hours (5 days)	5 hours	Peritonitis	Yes	Moribund on adm., doudenal ulcer
10	J. C.	51	4-16-44	No data	2	Peritonitis	No	——
11	L. U.	57	5-29-45	No data	17	Peritonitis	No	——
12	M. G.	24	3-9-46	48	5	Peritonitis	Yes	Duodenal ulcer, 1.2 cm.
13		43	1948	72	8 hours	Peritonitis	Yes	Moribund on adm.

TABLE XV. KNOWN SUBSEQUENT ULCER SURGERY

Gastric resection	6
Gastro-enterostomy	1
Total	7

period are better treated by conservative methods and with present day facilities a reasonably low mortality rate may be expected.

DISCUSSION

A group of cases of perforated ulcer will always include some cases so desperately ill when first seen that even the most optimistic individual will despair of their recovery.

It is well to point out that even some of the most desperate cases may be salvaged, if one is persistent.

We are reporting the following two cases that to us seem of special interest and illustrate what can be accomplished in these apparently hopeless cases.

The lesson seems to be: In the late case, give supportive treatment and correct complications as they arise.

CASE REPORTS OF TWO CASES TREATED WITHOUT OPERATIVE CLOSURE OF PERFORATIONS

Case A — U.C.Y.

White male, age 34 — Admitted to U. S. Veterans Hospital, Muskogee, on 8-27-50 by ambulance as a transfer from another hospital. On admission he was in a coma, dehydrated, in shock, and unable to give any history. His temperature was sub-normal,

LIBRARY OF THE

his pulse 120 per minute and his B.P. 90/60. Heart sounds were distant. His abdomen was rigid. There was apparent tenderness and rebound tenderness.

Laboratory work revealed WBC 15,300; neutrophils 79 per cent, lymphocytes 18 per cent; RBC 5,390,000. CO_2 combining power 35 volume per cent. Serum amylase 204. X-ray of the abdomen, upright, showed a large amount of air beneath the diaphragm.

Later, on the day of admission it was learned by telephone that the patient had on the day prior to admission, and 30 hours before, suddenly developed severe cramping abdominal pain that had persisted. He had been hospitalized elsewhere overnight.

His treatment consisted of Levine tube—Wangensteen suction to the stomach — parenteral fluids and electrolytes — Blood transfusions and parenteral antibiotics, chiefly penicillin and streptomycin.

By 9-5-50 he had passed a small amount of flatus but normal peristalsis failed to return. Therefore, a Harriss tube was passed into the upper G.I. tract.

On 9-14-50 laparotomy revealed a huge abscess of the upper abdomen that involved the area above and beneath the liver, and around the spleen. No recognizable loops of bowel were seen; presumably, these were in the pelvis. Numerous drains were inserted.

There was improvement following the incision and drainage. Bowel movements were re-established and he was able to eat once again.

By 9-30-50 he had developed a well developed thrombophlebitis of the left leg and thigh, and also, evidence of complete small bowel obstruction.

On 10-3-50 a laparotomy for insertion of an enterostomy tube was done. A loop of dilated small bowel was selected and a catheter was inserted. Two days later he passed flatus and the obstruction began to subside. Anticoagulants were given for the thrombophlebitis.

By 10-8-50 extreme dyspnea drew attention to the chest where signs of fluid were found. 1100 ccs. of yellow fluid were aspirated from the left chest. Next day 500 ccs. were aspirated.

On 10-9-50 a fecal fistula had been established through the latest laparotomy wound.

There was steady improvement following this. By 10-27-50 his fistula had closed. On 11-17-50 the enterostomy tube was removed.

On 12-20-50 he was discharged after 115 hospital days.

On 1-24-51 follow-up x-rays showed "chronic hypertrophic gastritis and duodenitis. An ulcer crater is not demonstrated." He has gained 32 pounds since his first recorded weight after his long illness. He was feeling well and active.

Case B — J. M.

White male, age 50, admitted to United States Veterans Administration Hospital, Muskogee, on 1-13-51 at 8:30 P.M., 12 hours after the onset of severe upper abdominal pain which rapidly became generalized and persisted in spite of narcotics prior to admission. He had vomited repeatedly.

There was an antecedent history of indigestion and stomach trouble since 1942.

He was desperately ill, in shock (B.P. 80 60) (T.P.R. 98.6—140—26), dehydrated, almost delirious. There was marked generalized abdominal tenderness and rigidity.

Laboratory workup showed WBC 3,750; neutrophils 81 per cent; lymphocytes 14 per cent; RBC 5,760,000; hemoglobin 17.25. Serum amylase 424 units. Upright x-ray film of the abdomen showed a moderate amount of free air beneath the diaphragm.

Treatment consisted of instituting continuous gastric suction, and of starting intravenous glucose and saline which was soon changed to plasma because of the extreme hemoconcentration. During the next 24 hours he received a total of nine liters of fluids—including five pints of blood, several liters glucose in water, several liters of plasma and human serum albumin. In spite of this he continued to be in shock, and to exhibit marked hemoconcentration—the RBC nearly six million cells—the hemoglobin 16 to 18 grams and the hematocrit about 60 per cent. The blood pressure failed to rise much above 80 to 85 systolic and 60 to 65 diastolic. He had a dry tongue and moist rales over the chest. The finger tips were cyanotic. He was started on cortisone 250 mgm. every eight hours.

The following day he had improved a little but continued desperately ill. He remained in shock for nearly 72 hours.

By January 17 his blood pressure had risen to 130 70. He was irrational at times.

On January 18 extreme abdominal distention and dyspnea with extreme abdominal tympany developed. There was marked compression atelectasis of both lungs by x-ray examination. The abdomen was aspirated with a large bore needle liberating large quantities of gas and thin purulent fluid—

resulting in marked improvement in the patient's condition. Next day the extreme distention and respiratory embarrassment had returned. A trocar was introduced into the peritoneal cavity liberating gas and 1000 ccs. of amber bile-stained fluid. A 16 F. catheter was inserted and allowed to drain into a bedside bottle. This established an external biliary fistula as it soon became apparent that the ulcer was leaking into the peritoneal cavity. The Levine tube was left in place in the stomach. A Harriss tube was passed, and when down into the jejunum, the aspirate from the Levine tube in the stomach and the drainage from the catheter in the peritoneal cavity were collected and re-fed through the Harriss tube as severe alkalosis developed.

The above condition persisted for many days and weeks — the patient being maintained on tube feedings mixed with fluids collected from the fistulae—fed through the Harriss tube, and blood, human serum albumin, electrolytes including potassium being given intravenously. On several occasions because of extreme alkalosis it was necessary to give intravenous hydrochloric acid and hypopotassemia required potassium chloride. All the while he received parenteral antibiotics—streptomycin, penicillin, crysticillin, and later aureomycin and terramycin.

Evidence of a subphrenic abscess was present for a long time and fever varying from normal to 103-WBC elevated to 20,000 to 25,000 and marked left shift supported the suspicion of sepsis—No drainage was felt necessary at that time. Subsequently he improved.

By April 19 the duodenal fistula was closed. His general condition was poor and he was still losing weight but all tubes were removed.

Since that date he has improved—at first, slowly, and more recently more rapidly. Present weight is 106—low point was 98. He is afebrile—but still has a reversal of A-G ratio, a mild anemia, and a shift to the left on the hemogram. His recovery is now confidently anticipated.

MEET OUR CONTRIBUTORS

W. Pat Fite, M.D., F.A.C.S., F.I.C.S., aud *Alfred H. Krause, M.D.*, both of Muskogee, are joint authors of "Management of Perforated Peptic Ulcer" in this issue. Doctor Fite was graduated from the University of Virginia in 1916 and interned at New York Polyclinic. His residency was served iu army hospitals as he served 26 months in World War I. He has been certified by the Americau Board of Surgery.

Doctor Krause was graduated from Washington University, St. Louis, iu 1935, and served his internship and residency at St. Louis City Hospital. He has beeu certified by the Board of Surgery and is chief of surgery at the Veterans Admiuistration hospital, Muskogee. He served 26 months in the army in World War II, 14 of which was spent overseas.

Harrell C. Dodson, M.D., F.A.C.S. and *L. J. Starry, M.D.*, F.A.C.S., Oklahoma City, wrote "Carcinoma of the Thyroid Gland" in this issue. Doctor Dodson was graduated from the University of Oklahoma School of Medicine in 1941 and served his internship and residency in general surgery at University Hospitals. He has been certified by the American Board of Surgery. Doctor Dodson, who was a navy lieutenant, was in service 35 months during World War II with 20 months of that time served overseas.

Doctor Starry, who is chief of staff at St. Anthony's, Oklahoma City, was graduated from Washington University, St. Louis, in 1919. He interned at St. Anthony Hospital.

Earl D. McBride, M.D., Oklahoma City, wrote "Herniated Interverterbral Disc-Indications for Morticed Bone-Block Fusion." He was graduated from Columbia University in 1914 and interned at Sydenham Hospital and Bellevue, New York. His residency in orthopedics was served at the Hospital for Ruptured and Crippled, New York. He has been certified by the Board of Orthopedic Surgery.

NEWS FROM OKLAHOMA'S DEFENSE BLOOD CENTER

By J. R. B. Branch, M.D., Director

Since the last report of our activities on December 20, 1951, the two bloodmobiles have continued to roll along in Oklahoma County and throughout the state. During this interval, we have collected and shipped 3,341 pints of blood for use of the Armed Forces. This brings the total from October through January 19 to 10,391 pints. The response locally and in the participating county chapters continues to be very satisfactory, and we are so far having no trouble meeting our quota. We are being called upon for increasing amounts of whole type "O" blood for direct shipment to Korea. These figures are classified and can only be released after a month has elapsed.

So far we have had 38 operations in Oklahoma County, receiving 3,653.5 pints of blood, and 49 operations in various counties, where we received 6,737.5 pints. Although this response is entirely satisfactory, we feel that there must be uo letdown iu order that our quota be maiutained. It will not be decreased, and the chances are that it will probably be increased.

It is hoped that those county societies who have not yet appointed a medical adviser to the County Red Cross chapter do so as soon as possible.

The new center on Tenth Street in Oklahoma City is now occupied aud our mobile units are operating from there as headquarters.

HERNIATED INTERVERTEBRAL DISK, INDICATIONS FOR MORTICED BONE-BLOCK FUSION*

EARL D. MCBRIDE, M.D.

OKLAHOMA CITY, OKLAHOMA

The characteristic symptoms of herniated intervertebral disk have become distinctively classic. The typical clinical picture is clearly indicative of the diagnosis. The excruciating sciatic pain of this syndrome may drive the sufferer to readily accept surgery and fortunately, relief is usually spectacular, prompt, and gratifying. It must be realized however that the greater proportion of persons complaining of low back pain do not have a herniated intervertebral disk. The urgency for relief of severe chronic, and often intolerable pain, in the lumbosacral area should not lead too hastily to surgery. Likewise, the remarkable results of simply excising the herniated disk should not mask the importance of the associated pathologic factors such as skeletal instability and deficiency.

Neglect of associated skeletal pathology may result in the return of disabling symptoms of chronic low back pain. This greatly distracts from the early satisfaction of the disk operation and may lead to profound disappointments. The articulo-muscular structures likewise must be considered for the various disease processes including the entire category of rheumatic affections, especially myofibrositis and rheumatoid or degenerative arthritis, erosion of the articular facts, degenrative wear and tear processes of the cartilagenous tissues, calcification of the joint capsules and ligaments, as evidenced by spur-like lipping and narrowed joint spaces. Injury in the articular structures so often claimed as the source of disability may be a superimposed aggravation of a local disease process involving the joint tissues. However, more severe injury may result in tearing of the ligamentum flavum, rupture of the posterior ligaments of the neural canal, or tearing of the capsule of the articular facet to produce hemorrhage and swelling that will result in severe acute or chronic localized radiating pain simulating herniated intervertebral disk symptoms. Likewise, multiple, frequent wear and tear processes from occupational overuse of the back produce degenerative softening of the nucleus pulposis, that, although not herniated, nevertheless will produce periodic lumbago-like symptoms with atypical radiating pain. Congenital anomalies such as spondylolisthesis, transient fifth lumbar vertebra, or asymmetrical facets, so common to the lumbosacral region must be considered as a contributing cause of structural weakness in the development of symptoms from the various inciting agencies of disease or injury. Tumors or malignancy of the joint structures are usually secondary to foci elsewhere.

The neutral tissues of the lumbosacral area are subject to pathologic affections of the cauda equina and nerve roots, such as tumors, neuritis, meningitis, or arachnoiditis. The acute or chronic diseases affecting neural tissues should be considered. Congenital anomalies of the nerves are rare and seldom give rise to symptoms.

Chronic constitutional depreciation such as anemia, or fatigue, and postural states, or occupational strain, are important factors in the development of pain in the lumbar area and should never be neglected in the search of etiologic factors.

ROENTGENOGRAPHIC EXAMINATION of the lumbar spine is of great value in differentiating the diagnosis. However, the roentgenographic reading, no matter how striking, should not be accepted as diagnostic without full consideration of closely observed clinical symptoms and signs. Articular and skeletal changes must become quite extensive before they are demonstrable by even the best of radiographic technic. Lipiodol, or other radio-opaque injections are seldom necessary. Where a disk is actually herniated, such an examination may demonstrate the characteristic shadows but likewise the clinical symptoms and signs will be just as positive. If the symptoms are severe enough to indicate surgery, much more pathology can be uncovered by surgical exposure of the

*Presented before the Section on Surgery at the Annual Meeting of the Oklahoma State Medical Association, May 22, 1951.

articular structures than can ever be demonstrated by radiographic examination.

LABORATORY PROCEDURES are important. Failure to determine the acid phosphotase might lead to overlooking the diagnosis of carcinoma of the prostate. Pernicious anemia, diabetes, osteomalacia, and many systemic diseases may be detected through laboratory examination and should receive consideration.

CONSERVATIVE TREATMENT

Long before the first operation for herniated disk by Mixture and Barr in 1933, treatment as recommended by no less an authority than Goldthwait, was chiefly that of rest, manipulation, and occasionally sacroiliac fusion or lumbosacral fusion. The acute episode of sciatic pain of the disease gradually diminishes in a few months, even in the more severe cases. Unfortunately, it periodically returns. In many cases the symptoms are more those of iliolumbar pain that does not radiate below the knee. Conservative treatment consists of bilateral leg traction with the back in a flexed position. A plaster jacket to hold the lumbar spine in slight flexion is used for ambulatory treatment. Also useful is the flexion brace as devised by Paul Williams. Systemic flexion exercises are used very successfully in most cases except those with the more severe sciatic pain.

SURGICAL TREATMENT

The decision to resort to surgical treatment for pain in the lumber area must rest chiefly on thorough consideration of the inability to relieve the symptoms through conservative therapeutic and mechanical measures. Rest and pelvic traction, followed by postural exercises and systemic improvement relieve many cases where the acute severe symptoms would seem to justify surgery.

The surgical approach should have a greater objective than that of specific removal of the herniated intervertebral disk. There should be the intention to freely expose and thoroughly explore and repair the basic structural pathology as well as to remove the herniated disk. That is, that structural weakness that may have induced the disk to degenerate, herniate, or rupture, should be recognized and repaired. In an intervertebral joint, defective enough to cause extrusion of a disk, further degenerative changes can develop. In this respect the situation is comparable to the repair of inguinal hernia. One certainly would not remove the sac without repairing the strucеural weakness.

THE BONE BLOCK OPERATION

For many years the orthopedic surgeon has depended upon fusion to eliminate intractable joint pain. The exceedingly prompt relief from acute pain obtained by operation for a herniated disk did not mask for long the fact that the pathologic manifectations associated with herniation of the intervertebral disk are, fundamentally, structural deficiencies and only, secondarily, neurological

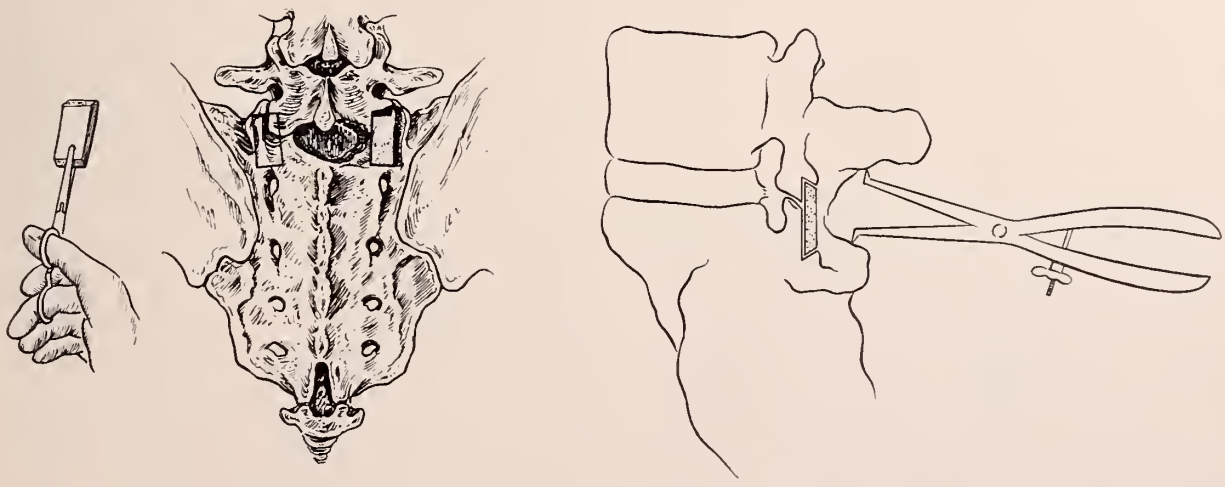


FIG. NO. 1. Illustrates the trausfacet boue block as a dovetailed graft impacted under distraction into a rectaugular mortise extending from the lamiua below, to across the facets above, to be fused into an interlaminal supportiug strut.

A. Anteroposterior aspect. B. Lateral position.

entities. The numerous variations in technique devised for fusing the lumbar spine indicate dissatisfaction with results. Firm bony fusion is difficult to obtain. About 20 per cent of the cases in which some form of bone transplant or the Hibbs bone chips were used will show pseudarthrosis in radiograms if taken in forward, backward, and lateral bending positions.

It was not until the principle of flexion of the affected intervertebral joint was proved to relieve nerve stress that more permanent satisfactory results were obtained.

The author published a method of fusion in 1949,[1] called the "Morticed Transfacet Bone-Block." This technic has been used in over 1500 cases. The method greatly simplifies the added task of fusing after removal of the herniated disc. Its advantages are:

1. It is seldom necessary to secure a graft from the tibia or ilium.
2. The period of confinement in bed is not over 10 to 14 days.
3. The technique requires only 30 minutes time, additional to the removal of the disk.
4. There is a minimum of mutilation of the spinal structures.
5. The articular facets are fused, which is of mechanical advantage.
6. The bone block rigidly stabilizes the interlaminal motion, immediately after being counter-sunk into position.
7. The intervertebral space is fixed in flexion which relieves the nerve compression and irritation.

TECHNIC

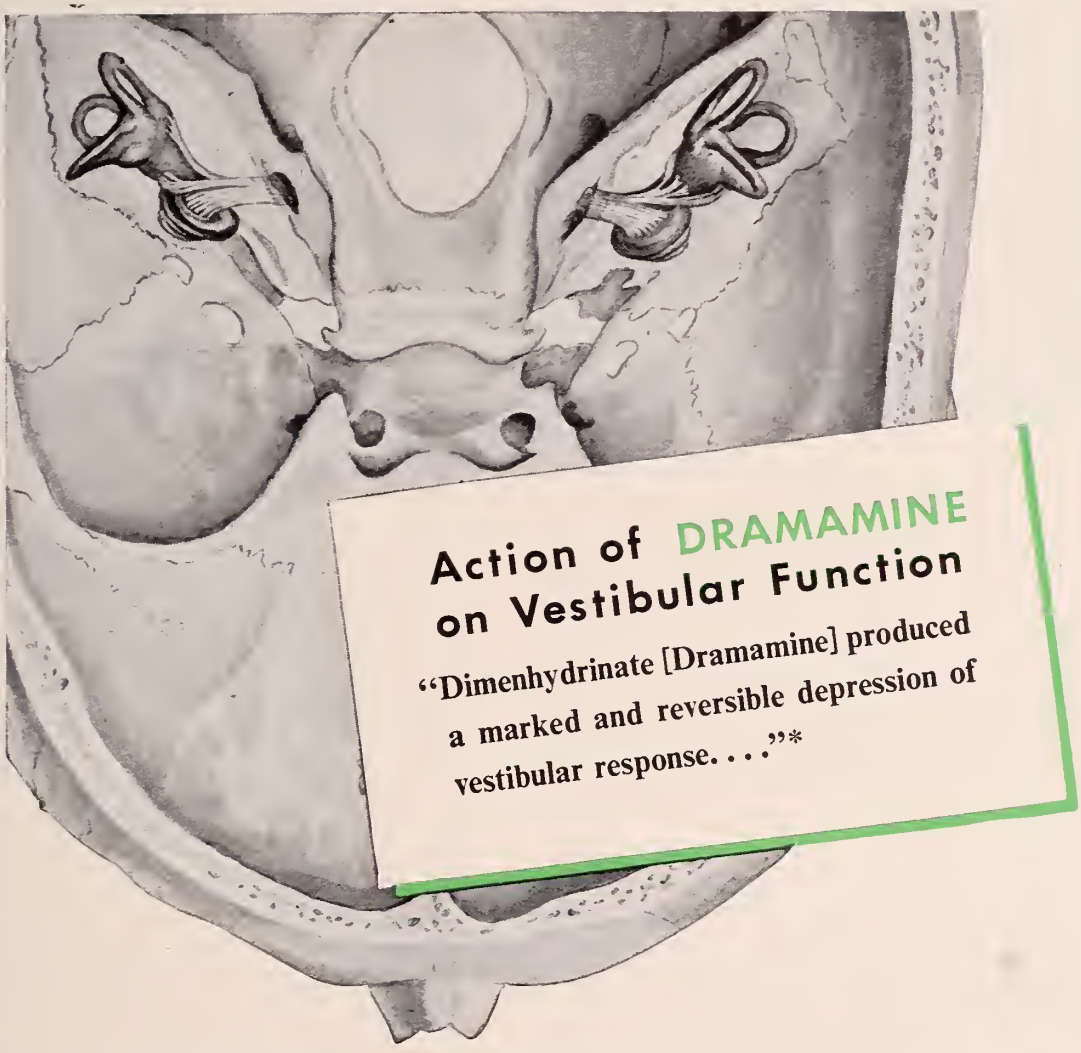
The technic consists of making a rectangular excavation into the articular facets above and into the laminae below. A rectangular bone-block about three-sixteenths of an inch thick and long enough to fit tightly when the laminae are spread, is wedged into the excavation by means of a mallet and punch. When the interlaminal spreaders are removed the spine extended, this graft is firmly locked into place and immediately stabilizes the joint. The bone blocks are made from the spinous processes which are split into two equal halves when removed and squared at each end. There is seldom any necessity for securing a graft from the leg, or ilium, thus there is a lessened task, as compared with the usual bone graft procedure. The surgical approach includes removal of the spinous processes of L-4, L-5 and S-1, together with removal of all ligamentous tissue, including the ligamentum flavum, articular capsules, and inter-spinous ligaments. In removal of the disk, preceding the fusion, the bleeding is controlled by cotton tampons, coagulation and gel-foam. If the disk is ruptured the extruded material is first removed. If not, the posterior capsule is incised and the protruding disk and all the disk material is removed that can be grasped with the pituitary forceps. If the disk in the suspected region is not herniated or ruptured, the posterior capsule is tested and if found lax or thin, it is opened and some of the disk examined. If found to be mushy or soft, it is thoroughly removed. If the suspected region does not seem sufficiently affected to justify the symptoms, the interspace above or below should be explored. Great care should be used to produce as little surgical trauma of the neural tissues as possible.

Thorough decompression of the nerve root is essential. The ronguers are used to bite off the bony laminal roof above and below so that swelling will not compress or irritate the nerve.

SUMMARY

The symptoms of herniated intervertebral disk are definitely characteristic. The greater proportion of persons complaining of low back pain do not have a herniated intervertebral disk. Differential diagnosis rests upon a full knowledge of characteristic signs and symptoms of the various pathologic affections of the low back. A great majority of cases with moderately severe low back symptoms recover with conservative treatment. Surgical removal of the herniated disk is indicated where the symptoms are severe and the diagnosis unquestionably clear. Fusion of the affected articulations is usually indicated in order to assure stability in the damaged skeletal structures. The author's mortised facet bone block type of fusion requires a minimum of extra surgical time and affords immediate skeletal stabilization.

1. A Morticed Bone-Block for Lumbosacral Fusion. Earl D. McBride, M.D., Journal of Bone and Joint Surgery, 31-A: 2:385-393 (April) 1949.



In a study of the action of Dramamine on vestibular function, Gutner and his associates found that Dramamine "significantly delayed the onset of nystagmus, shortened the duration of nystagmus and increased the milliamperage necessary to effect tilting."

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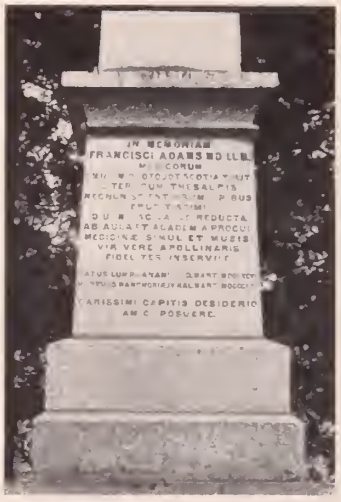
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*Gutner, L. B.; Gould, W. J., and Batterman, R. D.: Action of Dimenhydrinate (Dramamine) and Other Drugs on Vestibular Function, Arch. Otolaryng. *53*:308 (March) 1951.

RESEARCH IN THE SERVICE OF MEDICINE SEARLE



Special Article

A GREAT GENERAL PRACTITIONER

LEWIS J. MOORMAN, M.D.



(Dedicated to the Oklahoma Academy of General Practice)

Every physician who speaks English and is interested in the art and science of medicine should know Francis Adams (1796-1861) and at least one of the books he translated from the Greek into the English language, *The Genuine Works of Hippocrates*, Sydenham Society, two volumes. The first edition appeared in London, 1849, and the second and third editions in New York, 1886 and 1891.

Adams was the son of a laborer. He was born at Lumphanan, Scotland, 27 miles from Aberdeen. At the age of 17 he graduated from King's College, M.A. degree. It is believed that he served a two years' apprenticeship under a surgeon-practitioner in Edinburg. He then traveled to London where he became a member of the Royal College of Surgeons. Returning to Scotland, he settled in Banchory, a small village on the River Dee, 17 miles from Aberdeen.

Space permits only a few words about the life and work of this great physician, humanist and scholar who refused the chair in Greek at the University of Aberdeen to remain in this peaceful village on the River Dee in order that he might devote himself to general practice and his Greek translations. It has been said that:

"He spent his days in the arduousness and beneficient profession of a country surgeon, out in all weathers and at all hours, having the lives, the births, the deaths of a wild outlying region in his hands. This work he did so thoroughly that none could, with a shadow of justice, say that his learning lessened his readiness and his ability for the active duties of his profession in the fullest rounds of its requirements. He was an attentive, resolute, wise practitioner, just such a man as we would like to fall into the hands of, were we needing such aid. He was always up to the newest knowledge of the time, but never a slave to any system or addiction to swear by any master. The whole cast of his mind was thoroughly free and self-sustained."

What a challenge for the modern general practitioner now progressing with such promise in the U. S. under the stimulus of the Academy of General Practice. The following evidence of his youthful industry may discourage some, but as will be seen as a doctor on horseback, he lost no time—"I began by devoting seventeen hours a day to the study of Virgil and Horace and, it will be readily believed, such intense application soon made up for my early deficiencies. I read each of these six or seven times in succession. Having mastered the difficulties of Latin literature, I naturally turned my attention to Greek, as being the prototype of the other."

While engaged in country practice at Banchory, Adams made many valuable contributions to medical literature through his translations of Hippocrates and other important Greek writings.

When the day's work was done, he would go to bed with his books. After sleeping two or three hours, he would work through the night and then have a nap before breakfast. He claimed to have worked nine hours a day on the translation of Hippocrates.

The writer's abiding interest in this ideal country doctor appears in the following letters which so admirably supplement this brief sketch of a great man:

"15th May, 1951, My dear Dr. Moorman, Eureka! Eureka! We have found the statue of Francis Adams tucked away amidst dust and dirt in a very dark corner of the joiner's junk store. It is being cleaned up and touched up, and it will be all ready for you to see if you come over this summer. Do let me know when you are coming. With kind regards and good wishes, Yours sincerely, John Craig, M.B., Cc.B., F.R.C.P.E., Professor, Department of Child Health, Foresterhill, University of Aberdeen."

In the *British Medical Journal* of July 14, 1951, under "Medical News," there is a brief report of the June 16, 1951, meeting of the Scottish Society of the History of Medicine in Aberdeen at which Professor Craig described the founding of the Medico Chirugical Society of Aberdeen in December, 1789.

"After his address Professor Craig unveiled a bust of Dr. Francis Adams, the most noteworthy president of the society. For many years the bust had been lost and Professor Craig discovered it in an old storehouse used by King's College carpenters. Doctor Richards then spoke on Francis Adams."

On September 20th, 1951, the following letter with a photograph of the bust was received: "Dear Professor Moorman, I hope you will find space to publish this letter, and the accompanying photograph of the bust of Francis Adams, in your Journal of the Oklahoma State Medical Association.

"It is a far cry materially from Oklahoma City, Oklahoma, U.S.A. to Banchory, near Aberdeen, Scotland, but not so very far spiritually when a physician like yourself is interested in the great medical translator and Greek scholar, Francis Adams.

"He was President of our Aberdeen Medico-Chirurgical Society in 1844-45, and when, one hundred years later, I was looking into his life history, I came across in our University Library a reprint of your article in the Southern Medical Journal (Vol. 29, p. 435, April, 1936) in which you referred to a bust of Francis Adams by William Brodie, R.S.A. I had known of a bust before, for Mrs. Ella Hill Burton Rodger in her book 'Aberdeen Doctors' speaks of it as 'representing the strong features and sagacious expression of the Aberdeenshire surgeon'; but your mention of it brought the bust to mind again and I went to have a look at it. No bust was to be found anywhere either in King's College or Marischal College, the two colleges of our University. And, indeed, nobody in authority knew anything about it, and I found nobody who had ever seen it. The bust had been in the King's College Senatus Room but this room had been given up many years ago. However, I did find in our Library a photograph of the bust, and I knew then what I had to seek.

"A few years passed. This year, I have the privilege of being President of our Medico-Chirurgical Society; and also this year the Scottish Society of the History of Medicine was meeting for the first time in Aberdeen. So I determined to have a very thorough search for the missing bust. Eventually, the servitor in the Library told me there were some old statutes in the carpenter's junk store, a badly-lit room which had once been the ground floor of the Old Aberdeen brewery. In a dark corner of the room I found the bust, keeping company with those of two Roman Emperors.

"It was a great thrill to have such a happy ending to my quest—a quest that was initiated by reading your article written in 1936. Oklahoma and Aberdeen are, as I said, not far away. As Thucydides has it:

" 'The whole earth is the sepulchre of famous men.' Yours sincerely, John Craig."

Another link in the quest for knowledge about Francis Adams is shown by this letter and the picture of the Adams tombstone from Dr. Anderson of Aberdeen in response to the request of a mutual friend in Winnipeg, Canada: "19, Queen's Road, Aberdeen, 14th December, 1937, Dear Dr. Moorman, I regret very much the delay in forwarding the enclosed photograph of Dr. Francis Adams' Tombstone in Banchory. I trust, however, that it is not too late even now. Yours truly, Wm. Anderson."

On this granite obelisk the following inscription appears in Latin: "In memory of Francis Adams, M.D., L.L.D., of all physicians whom Scotland has produced most familiar with the treasures of literature and with the resources of science. Long in this retired vale, far from court or University, a true votary of Apollo, he devoted himself faithfully to medicine and muses."

Two summers ago, while the bust was still hidden in the joiner's junk room, the recipient of these letters traveled to Banchory on the River Dee 17 miles out of Aberdeen to stand before this monument with bowed head and to see where this great general practitioner, scholar and translator lived and worked.

President's Page

Your representatives learned a great deal about the American Medical Education Foundation at the 1952 Campaign Meeting in Chicago.

The A.M.E.F. solicits funds only from doctors. The National Fund for Medical Education, headed by business men and supported by several large philanthropic foundations, solicits funds from large corporations, foundations and other organizations. The practice of the National Fund seems to be to match the money raised by the A.M.E.F. from doctors and then to make grants to medical schools. The grants are of three types: Class A Grants are uniform grants to each medical school. In 1951 $15,000 was given to each four year medical school. Class B grants are on the basis of so much for each medical student. A grant of this type has been or is being made of approximately $17.00 per student. Class C Grants are to be made on the basis of demonstrated need of each individual school.

The thing that is of particular interest to doctors who are and have been giving money to medical school alumni funds is that such donations may be made to the A.M.E.F. and earmarked and designated to the school of the donor's choice. The chosen school will not only receive 100 per cent of such gifts over and above amounts granted by the Fund and Foundation but will be notified each month by the Foundation of such gifts and furnished a listing of the names of the donors. The advantage to the schools of giving through the Foundation is that such gifts will help swell the total gifts to the Foundation which will then be matched by the National Fund. It is to be emphasized that 100 per cent of the gifts go to the schools. The A.M.A. is paying the entire overhead of the A.M.E.F. and other foundations are paying the entire overhead of the National Fund.

A tentative goal of $2,000,000 from doctors for 1952 has been set up by the directors of the A.M.E.F. Their plans call for an intensive campaign at the State and County Society levels during the months of April, May and June. How extensive this campaign will be in Oklahoma must be decided by your Council and by your House of Delegates.

Let us remind you of the Postgraduate Courses to be given in 16 centers in the state beginning March 13th. There will be three lecture programs in each center. The general subject of the courses is "Review of General Medicine."

L. C. McHenry

President



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CURRENT ACTIVITIES AT THE OKLAHOMA MEDICAL RESEARCH FOUNDATION

EDWARD C. REIFENSTEIN, JR., M.D.
DIRECTOR



This is the fifth in a series of monthly articles concerning the activities of the Oklahoma Medical Research Foundation. The purpose of this article is to disenss the relationships that are being developed between the Oklahoma Medical Research Institnte and Hospital and the University of Oklahoma School of Medicine.

From its very inception the Oklahoma Medical Research Fonndation was conceived as an important central unit in the development of a great Medical Center around the University of Oklahoma School of Medicine. The idea for snch a Foundation arose with a number of the physicians associated with the School of Medicine, and the initial activity was carried on by the Alumni Association of the School of Medicine. In this endeavor, the doctors in the State who were graduates of the University of Oklahoma School of Medicine were joined by a great many physicians who, although they were graduates of other schools, manifested equal enthusiasm in the development of the Medical Center. It was apparent from the very beginning that, although the Oklahoma Medical Research Foundation was established as an independent, privately-owned, non-profit organization, it would be very closely affiliated with the University of Oklahoma School of Medicine.

Indeed, the Oklahoma Medical Research Institute and Research Hospital could hardly exist without close dependence upon the University of Oklahoma School of Medicine and its affiliated University Hospital, Veterans Hospital and other hospitals. Without this affiliation, the Fonndation's activities would lose a great deal of their value and significance. At the same time, there has been recognition on the part of the administrators and members of the faculty of the University of Oklahoma, the University of Oklahoma School of Medicine, and the Board of Regents that a properly conducted Medical Research Institute and Research Hospital wonld be of great valne to the Medical Center that is being developed around the University of Oklahoma School of Medicine. To this end, Dr. George L. Cross, President of the University of Oklahoma, the late Dr. Tom Lowry, former Dean of the University of Oklahoma School of Medicine, and Dr. Mark R. Everett, the present Dean of the University of Oklahoma School of Medicine, labored long in the interests of developing a sound Medical Research Institnte.

As a step in this direction, the Director of the Research Institute and Hospital has consistently adhered to the policy of bringing into the Staff of the Research Institute only those persons who were fully acceptable to the faculty of the School of Medicine. In all instances, members of the faculty of the School of Medicine were invited to assist in the interview of prospective candidates for key positions in the Research Institnte, and their personal reactions were considered in the selection of these individuals. The members of the various departments in the faculty of the School of Medicine have been most cooperative in this regard. All of the key personnel in the Research Institute have academic positions. A list of these follows:

Dr. Edward C. Reifenstein, Jr., Director of the Research Institnte and Hospital, is Professor of Research Medicine at the School of Medicine;

Dr. Charles D. Kochakian, Associate Director of the Research Institnte and Hospital, is Professor of Research Biochemistry;

Dr. Max N. Huffman, Member of the Research Institute and Hospital, is Professor of Research Biochemistry at the School of Medicine;

Dr. R. Palmer Howard, Member of the Research Institute and Hospital, is Associate Professor of Research Medicine at the School of Medicine;

Dr. Leonard P. Eliel, Member of the Research Institute and Hospital, is Associate Professor of Research Medicine at the University of Oklahoma School of Medicine;

Dr. Robert H. Furman, Member of the Research Institute and Hospital, is Associate Professor of Research Medicine in the School of Medicine;

Miss Shirley L. Wells, M.S., Member of the Research Institute and Hospital, is Associate Professor of Research Nntrition in the School of Medicine; and,

Miss Marian MacAulay, Member of the Research Institute and Hospital, is Research Associate in the University of Oklahoma School of Nursing.

These individuals will participate in the School of Medicine activities in a number of ways. All of them will take part, when needed, in the teaching of the under-graduate students in the Medical School Building, University Hospital, and its affiliated Hospitals. Similarly, they will participate in graduate training whenever needed. As time passes, all of them will be involved in cooperative research projects with the varions members of the faculty of the School of Medicine, both at the pre-clinical and the clinical levels. Furthermore, those who are clinically-trained will assist in the patient care as needed, and particularly will serve as consnltants and in the ont-patient clinics. In addition to these activities, which involve participation of the Research Institnte Staff in the other buildings of the Medical Center, all of these individuals also will participate in undergraduate and post-graduate training, seminars for practicing physicians, patient care and research in the buildings comprising the Research Institnte and the Research Hospital.

As far as the latter institution is concerned, plans are being pushed forward now to develop an active participation on an affiliated basis between the Research Hospital and the School of Medicine with its University Hospital, Veterans Hospital, and affiliated hospitals. In particular, it is anticipated that arrangements will be worked out whereby interns and residents will be able to have a period of service in the Research Hospital, and whereby medical students, stndent dietitians, and student nurses will be given a period of exposnre to the activities of an investigative nature in the Research Hospital.

Not only are the members of the Research Institnte tute and Hospital. It is anticipated that this collabora-

tion will increase considerably as the research projects in the Institute and Hospital reach a state of full activity. In additiou, certain individuals have been designated as Cousultants to assist the staff of the Research Institute and Hospital in developing and carrying on its program. The list at the preseut time includes: Dr. Cleve Beller, who is Radioisotope Consultant and Coordinator of Radioisotope studies; Dr. Howard C. Hopps, who is Consultaut in Pathology; Dr. Homer F. Marsh, who is Consultant in Bacteriology; Dr. Emil E. Palik, of Tulsa, Oklahoma, who is Consultant in Hematology; and Dr. Peter E. Russo, who is Consultant in Radiology. The list of Consultants will be expanded as the occasiou arises. Members of the Institute Staff are serving on a uumber of committees concerned with the problems of the growing Medical Center. Most of these have their origin in the School of Medicine.

A number of joint projects are under way involving collaboration between the University of Oklahoma School of Medicine facnlty members and the Oklahoma Medical Research Foundation. For example, Dr. M. R. Shetlar and Dr. Mark Everett are continuing a stndy on mucopolysaccharides in laboratories in the Research Institute Building under partial support from funds from the Oklahoma Medical Research Foundation. In addition, Doctor Shetlar is the Director of the Research Unit for the Will Rogers Veterans Hospital, which eventually will be honsed in the new hospital bnilding next to the Research Institnte on Thirteenth Street. It is not anticipated that his laboratories in this new building will be available until July of 1953. In the meantime, the Oklahoma Medical Research Foundation has made available to him three laboratories and the nse of the animal wing, cold rooms, and so forth, for the stndies which he is condnct-ing. Dr. Allan J. Stanley, and his associates, Dr. George S. Bozalis, Dr. Vernon D. Cushing, and Dr. Dick H. Huff, all of whom are members of the faculty of the School of Medicine have a laboratory assigned to them in the Research Institnte Bnilding and are being snpported, in part, by the Oklahoma Medical Research Foundation in a study of allergy. Dr. John Lamb, working in conjunction with Dr. Corinne Keaty, of the Research Institute Staff, and with Doctor Reifenstein, is receiving support from the Foundation for a study of the endocrine aspects of certain skin disorders. Similarly, Dr. Henry H. Tnrner, Dr. R. Palmer Howard, Dr. Corinne Keaty, and Doctor Reifenstein are condncting a study of children with precocions puberty, which is being supported by the Fonndation. Dr. John Lamb has a project involving the nse of certain compounds in mycological conditions, which is supported in part by the Oklahoma Medical Research Fonndation, aud in part by a grant through the help of the Fonndation administration; for this project a laboratory in the Research Institute has been assigned to Doctor Lamb and his assistant, Mr. Gerbert Rebell, a mycologist.

One of the most unique phases of the joint endeavors of the School of Medicine and the Fonndation is the Isotope Laboratory. This was financed by the Legislature of the State through the School of Medicine and has been eqnipped and manned by funds from the School of Medicine; however, becanse of the unusual facilities reqnired for such a unit, the Isotope Laboraand Hospital staff collaborating in projects that have been initiated by other members of the facnlty of the University of Oklahoma School of Medicine, bnt they, themselves, are gradually developing a series of collaborators from among the members of the facnlty of the University of Oklahoma School of Medicine, in order to carry out the research activities of the Research Institory, involving three units of laboratory space, has been established in quarters permanently assigned to it by the Oklahoma Medical Research Foundation on the second floor of the Research Institute Building. Arrangemeuts are beiug completed now also for the development of the Isotope Clinic in the Research Hospital. The Foundation has placed at the disposal of the Radioisotope Committee of the University of Oklahoma School of Medicine one of the patient rooms in the Research Hospital, which will be turned into a Radioisotope Clinic. The equipment will be supplied for this room by the School of Medicine. However, the specialized persounel, nurses, orderlies, and so forth, of the Research Hospital Staff, will assist in the operation of this Clinic Room. This enables the entire Radioisotope Program to be carried on under one administration, and represents an ideal example of the cooperation that exists between the School of Medicine and the Oklahoma Medical Research Foundation. This unit, incidentally, is the only center for the distribution of radioactive isotope materials at the present time in the State of Oklahoma.

In addition to these projects, the Foundation is supportiug studies by Dr. D. H. O'Donoghue dealing with the problem of increasiug the growth of stunted limbs in children, and by Dr. H. C. Dodson, involving reconstructive surgery of the bile ducts, in which use is being made of the animal surgery and other facilities of the auimal wing of the Oklahoma Medical Research Institute. During the past months, while the University of Oklahoma School of Medicine was in the process of completing the new addition to its building, several members of the facnlty were nnable to continue work in their own laboratories and were housed temporarily in laboratories in the Oklahoma Medical Research Institnte. These included Dr. Florene C. Kelly and Dr. L. V. Scott, of the Department of Bacteriology, Dr. Dale Clark of the Department of Biochemistry, Dr. Arthur A. Hellbaum of the Department of Pharmacology, and Dean Mark R. Everett of the School of Medicine. Doctor Everett, for several months, had an office on the first floor of the Medical Research Fonndation Building in order that he could carry on his activities without interference from the workmen who were constructing the addition to the School of Medicine.

As the scientific personnel are gradually being added to the staff at the Oklahoma Medical Research Institnte, a number of people are being inclnded who have had training at the University of Oklahoma School of Medicine and its affiliated institntions. These individnals include research assistants, technicians, dietitians, and nurses. Almost all of the people in these categories are being drawn from the State of Oklahoma and surronnding areas. Thns, the Oklahoma Medical Research Foundation is providing opportunities for scientifically-trained personnel in the State and expandiug the facilities available in the Medical Center. The Research Librarian of the Oklahoma Medical Research Institute and Hospital, Mrs. Ida Gist, was a Librarian at the University of Oklahoma School of Medicine for a time.

Recently the Director of the Research Institute and Hospital and the General Manager of the Foundation recognized the desirability of formalizing the relationship between the Oklahoma Medical Research Fonndation and the University of Oklahoma School of Medicine. The proposition, therefore, was presented to the Execntive Committee of the Board of Directors and the following arrangement has been created, and incorporated in the by-laws of the Foundation. The Foundation has set aside from its resources for the use of members of the facnlty of the University of Oklahoma School of Medicine, the following: 1) nine of the Research Laboratories; 2) 20 per cent of the undesignated fuuds

pledged after January 1, 1952, and collected after that time; 3) the privilege of utilizing the animal wing of the Research Institute; 4) the privilege of utilizing, on a fee basis mutually agreed upon, the facilities of the Central Research Laboratory of the Research Institute by all persons who have approved projects in the School of Medicine, whether they are supported by funds assigned from the Foundation or by funds assigned by the Dean of the School of Medicine. In order to supervise the allocation of these funds and the various facilities, a sub-committee on Foundation-Sponsored Research has been created on recommendation of Dr. Mark R. Everett, Dean of the University of Oklahoma School of Medicine, and has been approved by the Executive Committee of the Board of Directors of the Oklahoma Medical Research Foundation. Those from the School of Medicine are: Dr. Howard C. Hopps, Professor and Chairman of the Department of Pathology, who is Chairman of the Committee; Dr. Robert H. Bayley, Professor of Medicine; Dr. Arthur A. Hellbaum, Professor and Chairman of the Department of Pharmacology; Dr. Max N. Huffman, Professor of Research Biochemistry, also a staff member of the Institute and Hospital; Dr. Donald B. McMullen, Professor of Preventive Medicine and Public Health, who is Vice-Chairman of the Committee; Dr. William T. Newsom, Assistant Professor of Peditaries; Dr. Charles M. O'Leary, Assistant Professor of Surgery; Dr. Milton J. Serwer, Clinical Professor of Obstetrics; and Dr. A. N. Taylor, Associate Professor and Chairman of the Department of Physiology. Those representing the Foundation on this Committee will be Dr. Edward C. Reifenstein, Jr., Director of the Research Institute and Hospital; Mr. Hugh G. Payne, General Manager of the Oklahoma Medical Research Foundation; and Mr. O. C. Estes, Comptroller of the Oklahoma Medical Research Foundation.

The newly-created Committee will serve as a sub-committee of the General Research Advisory Board of the Oklahoma Medical Research Foundation, which was described in the second article of this section. The newly created committee will make its reports to the General Research Advisory Board, which, in turn, will report through the Director of the Research Institute and Hospital to the Executive Committee of the Board of Directors of the Oklahoma Medical Research Foundation. The Chairman of the new committee, Dr. Howard C. Hopps, will serve as liaison officer to the Director of the Research Institute and Hospital in all matters of collaboration involving the activities of this Committee.

In order to avoid unnecessary duplication of effort, Dr. Mark Everett, Dean of the University of Oklahoma School of Medicine, also has designated the faculty members of this committee as the Research Committee of the School of Medicine for the allocation of research funds at the disposal of the School of Medicine, including funds made available by the Legislature of the State of Oklahoma. The newly created Committee therefore will, in effect, have at its disposal both funds from the State and funds from private sources through the Foundation for the furtherance of research involving members of the faculty of the University of Oklahoma School of Medicine. It should be pointed out, however, that is is entirely possible to establish collaboration and joint projects between members of the faculty of the University of Oklahoma School of Medicine and the members of the Research Institute and Research Hospital quite apart from the activities of this Committee. There is, indeed, a considerable probability that arrangements of this sort will be worked out which will involve additional funds from the Oklahoma Medical Research Foundation and the use of additional space.

An important part of the cooperative venture between the two institutions is the Graduate Training Program which has been established. This Graduate Training Program is designed to provide the training and research facilities for candidates who wish to secure a Masters of Science degree or a Doctor of Philosophy degree in the basic subjects such as chemistry, biology, physiology, and so forth, through the University of Oklahoma at Norman, Oklahoma. Similar arrangements are being worked out with Oklahoma A. and M. at Stillwater. The program at the University of Oklahoma is under the supervision of Dr. Laurence Snyder, Dean of the Graduate School of the University of Oklahoma, and that at Oklahoma A. and M. is being developed with the assistance of Dr. Oliver Wilham, the President of Oklahoma A. and M. In addition, the University of Oklahoma School of Medicine participates actively in the Graduate Training Program of the University of Oklahoma and now provides courses leading to the degree of Master of Science in Medical Sciences and to Doctor of Philosophy in Medical Sciences. Candidates for these degrees also may obtain a portion of their training in the Oklahoma Medical Research Institute. As far as the Medical School is concerned, they are under the supervision of Dr. Arthur A. Hellbaum, Associate Dean of the Graduate School of the University of Oklahoma School of Medicine. All of the candidates for advanced degrees who are working in the Research Institute will be under the jurisdiction of Dr. Charles D. Kochakian, Associate Director of the Oklahoma Medical Research Institute and Hospital, who is in charge of the Graduate Training Program for the Oklahoma Medical Research Foundation.

In addition to these facilities, which involve graduates, there will be many opportunities for collaboration at the under-graduate level. It is anticipated that medical students will be able to participate as part-time workers in the research problems in the Research Institute and will also be able to take part in the studies of patients in the Research Hospital. In the same way, student nurses and student dietitians can also be given a period of exposure to research in the Research Hospital.

During the next year plans will be evolved for the establishment of a series of seminars designed to acquaint the physicians in Oklahoma with the activities of the Oklahoma Medical Research Institute, and, in particular, to present to them recent developments in the various fields of activity at the Foundation. In these seminars the members of the Research Institute staff will work in close conjunction with the faculty of the University of Oklahoma School of Medicine.

It is apparent from the information that has been presented that a closely knit program is being developed between the University of Oklahoma School of Medicine, on the one hand, and the Oklahoma Medical Research Foundation, on the other. This is aimed at providing long range research as a result of private financing of the Research Foundation; increasing the facilities for under-graduate medical education through research; assisting the research activities of the Medical School faculty through the additional facilities and financial support available; increasing the opportunity for development of young scientists in Oklahoma; assisting in improving the standards of practice in medicine, dentistry, pharmacy, and nursing; and increasing the opportunities for knowledge and post-graduate education for the members of these professions.

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1. Hutcheson, J. M.: Management of Cardiac Failure. *Virginia Med. Monthly*, 74:458, Oct., 1947.
2. Noth, P. H.: Pick's Disease: A Record of Eight Years' Treatment with Salyrgan, Ammonium Nitrate, and Abdominal Paracentesis. *Proc. Staff Meet. Mayo Clin.*, 12:513, Aug. 18, 1937.

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OKLAHOMA ACADEMY OF GENERAL PRACTICE MARCH MEETING TO FEATURE OUTSTANDING SPEAKERS IN MEDICINE, MEDICOLEGAL ASPECTS AND JUVENILE DELINQUENCY

Oklahoma physicians are invited to attend the Fourth Annual Meeting of the Oklahoma Academy of General Practice in Tulsa, Oklahoma, March 17 and 18. All sessions will be held in the Tulsa Hotel.

Several activities are also planned for wives of physicians attending, including a luncheon and scenic tour on Monday and a luncheon and style show on Tuesday.

One of the outstanding features of the meeting will be the panel discussion and seminar on juvenile delinquency Monday afternoon. Complete program is listed below:

SUNDAY, MARCH 16, 1952

3:00 P.M. Registration—Tulsa Hotel
4:00 P.M. Business meeting—Tulsa Hotel

MONDAY, MARCH 17, 1952

9:00 A.M. Vincent J. Derbes, M.D.—"Untoward Reactions of Cortisone and ACTH"
9:30 A.M. William Gordon, M.D.—"Management of the Coronary"
10:00 A.M. Louis J. Regan, M.D., LL.D.—"The Threat of Malpractice"
10:30-10:45 A.M.—BREAK—VISIT YOUR EXHIBITORS
10:45 A.M. F. A. Alexander, M.D.—"Spinal Anesthesia—Hazards and Safeguards"
11:15 A.M. John F. Holt, M.D.—"X-Ray Diagnosis of Chronic Arthritis and Allied Conditions"

VISIT YOUR EXHIBITORS

12:15 P.M. LUNCHEON AND ROUNDTABLE—Topaz Room—Address of Welcome, Mayor of Tulsa
2:00 P.M. Seminar on Juvenile Delinquency Followed by Panel Discussion—Topaz Room

Moderator—Stanley Truman, M.D., Oakland, Calif.

SPEAKERS:

Edward D. Greenwood, M.D., Vice-President, The Menninger Foundation, Topeka, Kans.
Buck Cook—Commissioner of Charities and Corrections, Oklahoma City
Judge George Norvell—Judge of the Juvenile Court, Tulsa
Howard N. Scott, Chief, Federal Probation Officer, Tulsa
Paul C. Benton, M.D., Psychiatrist to the Tulsa Child Guidance Clinic, Tulsa
Miss Elma L. Dyer, Social worker, Tulsa
Panel Discussion—Questions and Answers

7:00 P.M. Fellowship Hour
8:00 P.M. Dinner

After dinner speaker—Stanley Truman, M.D.
"The Doctor Is Human Too"

TUESDAY, MARCH 18, 1952

9:30 A.M. Louis J. Regan, M.D., L.L.D.—"The Prevention of Malpractice"
10:00 A.M. F. A. Duncan Alexander, M.D.—"Nerve Blocks for the Control of Pain"
10:30 A.M. BREAK—VISIT YOUR EXHIBITORS
10:45 A.M. N. D. Helland—"The Doctor and Blue Cross-Blue Shield in Oklahoma"
11:15 A.M. Vincent J. Derbes, M.D.—"Contact Dermatitis"
12:15 P.M. LUNCHEON AND ROUNTABLE—Topaz Room

PLEASE VISIT YOUR EXHIBITORS

2:00 P.M. Edward D. Greenwood, M.D.—"Child Psychiatry as it Relates to the General Practitioner"
2:30 P.M. John F. Holt, M.D.—"Some Practical Aspects of Pediatric Roentgenology"
3:00 P.M. William Gordon, M.D.—"Present Views Regarding the Management of the Hypertension Case"
3:30 P.M. *Meeting closes*

SPRING POSTGRADUATE PROGRAM ANNOUNCED

The Association's Educational Committee, in cooperation with the University of Oklahoma School of Medicine, announces a spring program of regional postgraduate medical education entitled "A" Review of General Medicine," to commence March 13, 1952.

This program is to be made available to the profession in the entire State through a series of three evening sessions to be offered in each of the following sixteen centers:

Altus
March 13
April 3
April 24

Ardmore
March 20
April 10
May 8

Bartlesville
March 27
April 17
May 15

Duncan
March 20
April 10
May 8

Durant
March 20
April 10
May 8

Enid
March 27
April 17
May 15

Guymon
April 3
(See Woodward)

Woodward
March 13
(See Guymon)
April 24

McAlester
March 20
April 10
May 8

Miami
March 27
April 17
May 15

Muskogee
March 20
April 10
May 8

Oklahoma City
March 13
April 3
April 24

Okmulgee
March 27
April 17
May 15

Stillwater
March 27
April 17
May 15

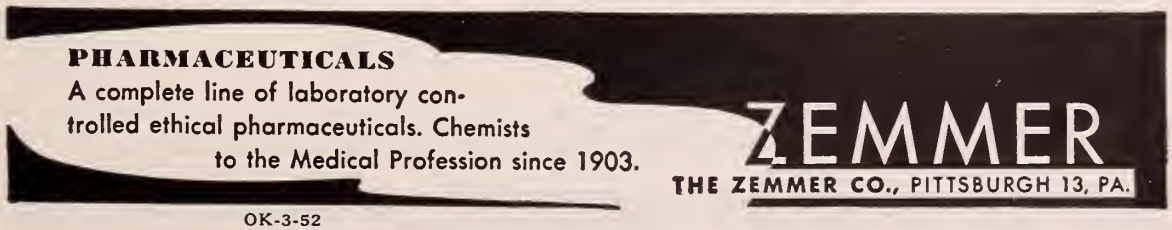
Shawnee
March 20
April 10
May 8

Tulsa
March 13
April 3
April 24

Each session will consist of two lectures on subjects of general medical interest. The subjects which have been selected by the membership of the Educational Committee which represents each of the Association's 14 councilor districts are:

Medicine and Therapeutics
Diagnosis and treatment of common skin disorders
Recent advances in pediatrics
Recent advances in surgery
Emergency orthopedic measures
Management of obstetrical problems

The visiting lecturers for these sessions will be selected by the Committee from the profession throughout the state and from the factulty of the medical school. A postgraduate chairman will be designated in each County Medical Society for the purpose of acquainting the membership with further details of the program and securing attendance.



MEDICAL SCHOOL NOTES

Message from DR. MARK R. EVERETT, *Dean of the School of Medicine*

I am grateful to the Editor of the Journal of the Oklahoma State Medical Association for giving me an opportunity to tell you about activities of the School of Medicine through a monthly article. I'm afraid I haven't taken enough "time out" to tell the state's medical profession what the School has been doing and what we hope to accomplish. Some of our efforts have shown very tangible results, such as a group of new buildings and an increase in the number of medical students. Other efforts, which have been less well publicized, are just as important as the steel and concrete structures being raised here on the campus. I am speaking especially about our endeavors to be of real service to the profession in matters related to the school's primary function—Medical Education.

The Faculty and Administration of the School of Medicine have been the first to realize that growth in physical size is not of itself sufficient to create a better school, and for this reason we are developing every means of improving our services to the medical profession and to the general public. This cannot be accomplished except through individuals who conduct and encourage the work of the School, the full-time and visiting staffs, the preceptors and alumni, and the medical profession through constructive interest of its individual members in every part of the state.

The increasing support from the medical profession has had a profound effect on the successful undertakings of the School, since expressions of good will and advice have provided encouragement at times when important problems arose. And, too, the physicians' help with legislative problems has accounted in no small measure for the generous support that has been granted our institution. The School of Medicine is deeply indebted to many groups of physicians and other civic minded citizens working together to graduate more physicians to supply the needs of the State.

I know you will be interested in hearing that the School of Medicine has this year received $15,000.00 from the National Fund for Medical Education, our school sharing equally with the other medical schools in this fund. As you know, the American Medical Association endorsed this Foundation's efforts to provide additional support for medical education from private sources, and it contributed $500,000 to start the initial campaign for funds. More funds are to be distributed to the nation's medical schools later, and the American Medical Association has voted another half-million dollars to the Foundation for the 1952 Campaign. Donations of money to the National Fund by private citizens and industries in support of medical education is indicative of the public's interest in medical problems, and this interest and support is gratefully acknowledged by those of us engaged in medical education.

The contractors hastened the expansion of our physical plant to provide sufficient space for the admission last fall of 100 students. In 1947 the total area of the Medical School Building was 52,031 sq. ft.; it is now 104,066 sq. ft., a 100 per cent increase. This increase in size enlarged our respective facilities as follows: student laboratories 62 per cent; lecture rooms 64 per cent; offices and research laboratories 115 per cent; library 170 per cent. As the result of the efforts of the legislature, the Governor, the regents, our alumni, and many interested physicians and lay friends, adequate space and facilities are now available to the members of our full-time basic science faculty to allow efficiency in teaching and expansion of research programs. In other words, we have provided the physical necessities for sound basic science instruction. It is very important that the medical library has now been liberated from its exceedingly crowded quarters. No wordy description of the expanded facilities can take the place of actually seeing them, and I extend a cordial welcome to all physicians to come to the medical school for a visit with faculty members when you are in Oklahoma City.

Next month's article will contain a brief outline and interpretation of the "Essentials of an Acceptable Medical School" as revised in 1951 by the Council on Medical Education and Hospitals of the American Medical Association. Any plans for the School's improved operation should be based on these professional recommendations. Subsequent articles will provide information concerning our teaching, research and clinical activities.

POSTGRADUATE COURSES

A postgradute course in the fundamentals of ELECTROCARDIOGRAPHY will be held at The University of Oklahoma School of Medicine, Oklahoma City, March 3 through March 8, 1952. The course will be conducted by Dr. Robert H. Bayley, Professor of Medicine, School of Medicine. The instruction time will be divided between lecture and laboratory periods. Tuition will be $60.00. For further information write the Postgraduate Office.

A postgraduate course in REVIEW OF GENERAL SURGERY AND SURGICAL TECHNIQUE will be given at University Hospital beginning Tuesday, March 11 at 7:00 p.m. for 10 weekly sessions. Dr. Harrell C. Dodson, Jr., Associate Professor of Surgery, School of Medicine, will conduct the course. It will be a review of newer concepts and techniques in the field of surgery and is planned to be of interest both to physicians who limit their practice to surgery and to those who do surgery as a part of their general practice. Sessions will consist of informal discussions, clinical and operating room demonstrations. Registration will be limited to 30. Tuition will be $25.00. REGISTER EARLY TO INSURE A PLACE FOR THIS COURSE. All registrations, fees, and communications can be sent to the Office of Postgraduate Instruction, 800 N.E. 13th Street, Oklahoma City.

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Ward, L. E., Slocumb, C. H., Polley, H. F., Lowman, E. W., and Hench, P. S.: *Proc. Staff Mtgs., Mayo Clinic* 26: 361, September 26, 1951.

Literature on Request

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Oklahoma Heart Association

One of the youngest, and most aggressive volunteer health organizations in the state is the Oklahoma State Heart Association, organized in 1950.

Within two years, the association has enlisted the active interest of a large group of Oklahoma's leading laymen and physicians, raising funds from work against heart disease, sponsored a program of research and developed a year-round educational program for both professional and lay people. This is a young organization which has considerable interest and support with the possibility of real accomplishment, so long as it has the leadership of the medical profession and the cooperation of the members of the State Medical Association.

The Heart association is governed by a board of directors, with Paul K. Leonhard, Capitol Hill, Oklahoma City businessman as chairman. Officers include George N. Barry, M.D., Oklahoma City, president; Jim Lookabaugh, Oklahoma City businessman, president-elect; W. J. Trainor, M.D., Tulsa, vice-president; Paul C. Cameron, Pryor, secretary; and L. D. Lacey, Oklahoma City banker, treasurer.

Office space has been provided in the Oklahoma Medical Research Foundation, 825 N.E. 13th, Oklahoma City, with Hugh Payne, general manager of the Foundation, serving as acting executive secretary.

The Oklahoma group is affiliated with the American Heart association. Development of the public fight in Oklahoma against heart disease began in Tulsa, where a county chapter was formed several years ago.

The American Heart association is well known to physicians. It was originated by physicians as a professional group for the study of cardiovascular diseases. However, in 1947 it was reorganized, under the leadership of the physicians, into a national voluntary health agency. Spurred by public interest in the problem, the association now has state and county organizations in nearly every state.

The problem of cardiovascular diseases is well known. The death rate from heart disease has been on a continuous up-trend as far back as records are available. Today it is the leading cause of death, taking approximately one death in every three. Many of these deaths are among the younger age group.

During the year, all residents of Oklahoma should become aware of the Heart Association and its program.

Of primary value will be the heart research program supported by the organization. The board of directors has voted that one-third of the money raised for the heart fund and remaining in Oklahoma will be given to the Oklahoma Medical Research Foundation to support its program of heart research. The state has a money raising goal of $150,000 this year, with 75 per cent of the money raised to stay in the state.

There are three major committees which will develop and carry out the educational program, with Miss Maxine Turner, former nutritionist at the Oklahoma State Health department, serving as the director.

The Community Service committee will be headed by Kirk T. Mosley, M.D., of the division of chronic disease control, State Health department. The long duration of cardiovascular diseases creates emotional and economic problems for the patient and his family. To meet the total needs of the patient there should be coordinated efforts by the general physicians, the cardiologist, the psychiatrist, peditatrician, other specialists, the nurse, social worker, nutritionist, occupational therapist, rehabilitation worker and other health workers. All of these professions are represented on the committee, which will study the facilities that are available to the heart patient and try to integrate or improve existing facilities. The committee will work to find means of better case finding, early diagnosis and adequate therapy.

Mr. Leonhard heads the public education committee. On the theory that people need to be encouraged to seek early diagnosis and adequate therapy, this committee will work to acquaint the general public with the following facts:

1. Cardiovascular diseases include many diseases of the heart and circulation.
2. Some of these diseases are preventable—for example, heart conditions which follow acute communicable diseases.
3. All cardiovascular diseases can be handled best if diagnosed early and treated properly.
4. Most heart ailments can be materially improved by proper treatment.
5. Cardiovascular diseases do not necessarily prevent a person from earning a living in suitable jobs and enjoying himself in appropriate recreations.
6. Symptoms that seem to suggest a cardiovascular disease do not necessarily mean a diseased heart. Only a physician can tell.

The committee proposes to reach the public with these points through a qualified speakers' bureau and printed materials for state and local organizations; through exhibits for display and through the newspapers and radio stations of Oklahoma.

George L. Winn, M.D., of the School of Medicine of the University of Oklahoma heads the committee on professional education. Typical of the services to be rendered by this committee will be postgraduate courses and seminars for physicians, nurses, medical social workers and other professional groups having responsibility for the care, treatment and follow-up of heart patients. The committee will also send information on the advances in the diagnosis and treatment of heart disease to professional workers.

ATTENTION!

Information has been received that a man has apparently called on two or more doctors in the State of Oklahoma giving the name of "Mr. Anderson" claiming that his alleged mother, Mrs. Anna Anderson, has a carcinoma of of the rectum having been operated on by another doctor and that her case is incurable. Also claiming that this other doctor had prescribed as much as 100 tabs. ½ gr. each of Morphine Sulphate at a time. This person is not accompanied by the alleged patient and it is believed that such a patient does not exist.

Information is that this has been done on various occasions in the past giving various ailments or reasons and that some doctors have prescribed narcotic drugs on such occasions, which is among other things, a violation of Narcotic Laws for the doctor to do same. The Narcotic Law requires, that a doctor must be in personal attendance to be within his rights to prescribe or dispense narcotic drugs and further that a doctor may prescribe or dispense narcotic drugs only for the bonafide medical needs of a patient, in quantities sufficient for legitimate medical needs for relief of pain, and not to satisfy any addiction.

If such a ruse is attempted or worked on any member of the profession, it would be appreciated if the subject be apprehended by notifying the local authorities in order that they in turn could notify the Federal Bureau of Narcotics.—Treasury Department, Bureau of Narcotics.

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Therapy for Vascular Headache to Reverse the Physiologic Disturbance

Headache, a problem encountered in all kinds of medical practice, may occur in association with any of a variety of disorders, some organic, other purely functional.

Among the several types, functional headaches present the greatest problem because of their obscure etiology and recurrent nature.

Among these are:

Migraine (both classical and variant forms)
Tension headache
Psychogenic headache
Histaminic cephalgia

Wolff and his co-workers established that the pain of these headches is due to disturbance of the tonus of cranial blood vessels — hence the term *vascular headaches.*

The craniovascular changes associated with the several phases of the typical migraine attack are:

Vasoconstriction — to which the visual prodromata are attributable. It is possible to abort the attack during this phase in all but a few cases. (See treatment below.)

Vasodilatation — as the vessels lose their tone, exaggerated pulsations set in, resulting in the throbbing pain which characterizes vascular headache. Treatment for the attack is still effective during this phase. (See below.)

Vessel Edema — if the vasodilation continues for too long, vessel walls become edematous; this changes the character of the pain to a steady, intense aching. The attack can now no longer be checked, even with maximum dosage of specific drugs. *Moreover, sustained headache often induces reflex neck muscle tension, a source of residual pain.*

Therapy: 1. Reduce the frequency of attacks — psychotherapy and regulation of living habits to avoid fatigue and nervous tension.

2. Relieve the acute attack — of the numerous drugs which have been tried, ergotamine and its derivative preparations have proved most effective. The newest product is oral tablets of Cafergot®, N. N. R. (ergotamine with caffeine 'Sandoz'). When dosage is adjusted to the needs of the individual, Cafergot will give good relief in 85% of cases. It enables a greater number of patients to benefit from early administration since the oral route simplifies treatment as compared to parenteral therapy.

The dosage procedure is:

1. Take 2 tablets at first sign of the attack.
2. If attack continues, take one additional tablet every ½ hour until attack is terminated *(max. 6 tabs. per attack).*

Many migraine patients delay taking medication until the attack is at its height. Explicit dosage instructions may be forgotten unless the patient comes to realize their importance. Therefore, to encourage adherence to correct procedure, we have prepared pads outlining detailed dosage instructions. Supplies of these INSTRUCTION SLIPS will gladly be sent upon request.

GENERAL REFERENCES: DeJong, R.: Chicago M. Soc. Bull *54:* 106, 1951. Friedman, A.: Modern Headache Therapy, St. Louis, C. V. Mosby Co., 1951. Wolff, H.: Headache and Other Head Pain, N. Y., Oxford Univ. Press, 1948.

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OBITUARIES

M. B. SCOTT, M.D.
1879-1951

M. B. Scott, M.D., 72, died January 5 at Delaware while watching a television program in his home.

Doctor Scott came to Delaware from Webbers Falls in 1908. On September 9, 1950, Dr. and Mrs. Scott celebrated their golden wedding anniversary.

Doctor Scott had been a Mason since 1901 and was a member of the Delaware lodge. He was a member of the Methodist church. Survivors include the widow of the home, three sons, two daughters, one brother and two grandchildren.

F. M. BAILEY, M.D.
1872-1952

F. M. Bailey, M.D., Oklahoma City physician, died December 30 in Will Rogers hospital, Oklahoma City. Doctor Bailey was born March 22, 1872. Until his retirement he was medical examiner for the Oklahoma National Life Insurance company, Oklahoma City.

W. B. PUTNAM, M.D.
1871-1952

W. B. Putnam, M.D., 81-year-old Carnegie physician, died January 17 at Carnegie. Born in Alabama and a graduate of that state's university, he received his medical degree from the University of the South at Sewanee, Tenn. He came to Oklahoma in 1907 to start his practice at Alfalfa where he stayed 11 years before moving to Carnegie.

Survivors are a daughter, one brother and four grandchildren.

W. Z. McCLAIN, M.D.
1883-1952

W. Z. McClain, M.D., Marlow physician for 25 years, died at Crockett, Texas, January 16, 1952, where he had moved two days before from Marlow. He was born near Houston, Texas, March 16, 1883.

WILLIAM E. HUBBARD, M.D.
1916-1952

William E. Hubbard, M.D., formerly of Oklahoma City, Frederick and Tipton, died January 9 at Little Rock, where he was studying psychiatry. Death was attributed to a heart condition.

Doctor Hubbard was born in Abilene, Texas, September 17, 1916. He lived for several years in Stillwater before entering the University of Oklahoma medical school. He graduated in 1943 and entered the service. He served in the army for three years and was a major at the time he was released from service.

Survivors include the widow of the home, three sons, one daughter, his mother and a sister.

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HAVE YOU HEARD?

Lewis J. Moorman, M.D., Oklahoma City, discussed socialized medicine at the Frederick Presbyterian Men's Supper club recently.

Loraine Schmidt, M.D., newly appointed Wagoner county health director, was guest speaker at a meeting of the Wagoner Rotary club.

George L. Berry, M.D., Lawton physician, has for his hobby a collection of cactus plants and recently appeared on a television show featuring some of the outstanding plants of his collection.

Richard H. Burgtorf, M.D., formerly of Oklahoma City, has joined the Newman Clinic staff at Shattuck.

Odis Cook, M.D., Madill, is the new Madill chamber of commerce president.

C. L. Rogers, M.D., Watonga, spoke on poliomylitis at a Watonga Kiwanis club meeting recently.

Harold J. Binder, M.D. and *Edwin Fair, M.D.*, both of Oklahoma City, were speakers in the marriage forum recently conducted at the YMCA in Oklahoma City.

Avery Wright, M.D., Enid, is the newly elected head of the St. Mary's hospital staff at Enid.

Louis Farr, M.D., Oklahoma City, was guest speaker at the Kindergarten Mother's club of Lee school in Oklahoma City recently.

James O. Asher, M.D., formerly of Ardmore, has opened his offices in Altus.

P. P. Nesbitt, M.D., and Mrs. Nesbitt, Tulsa, have returned from a month's trip to Tucson, Ariz., and Los Angeles, Calif.

L. G. Neal, M.D. and *C. E. Northcutt, M.D.*, Ponca City, were recently presented awards for 25 continuous years of membership in the Kiwanis club of that city.

G. E. Scott, M.D., pioneer Ringwood physician, was recently honored by the citizens of his community on his birthday. He was presented with several gifts and an estimated 2,000 persons attended the basket dinner and celebration.

Hugh Galbraith, M.D., Oklahoma City psychiatrist, spoke on "Murder" when he addressed the South Oklahoma Rotary club.

W. Orville Davis, M.D. and *Edward M. Thorp, M.D.*, Cushing, have formally opened their new, modernistic 19-room clinic, a structure of pumice stone blocks and brick veneer.

C. P. Bondurant, M.D. is a new director of the Oklahoma City chamber of commerce.

Joseph W. Kelso, M.D., Oklahoma City, spoke on God's Hand and Man's Hand in Modern Medicine" at a recent meeting of the Oklahoma City Ministerial Alliance.

A. C. Fina, M.D. has been named full time health director of Atoka and Pushmataha counties.

Forest Hale, M.D. is the new county superintendent of health of Alfalfa county.

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POSTGRADUATE COURSES

in

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GERIATRICS — 3 days, March 24-26

ANESTHESIOLOGY — 3 days, April 14-16

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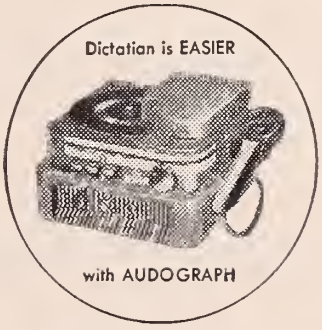
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MEDICAL SOCIETIES AROUND THE STATE

Garfield-Kingfisher

Austin H. Bell, M.D., Oklahoma City, gave an illustrated lecture on "Diagnostic Surgical Conditions of the Chest" at the Garfield-Kingfisher County Medical Society.

Washington-Nowata

Dr. and Mrs. Keiffer Davis entertained at a reception for physicians, their wives and guests at the Bartlesville Hillcrest Country club following the annual dinner of the society held recently. Ford Jerrell of Tulsa was guest speaker. Cole D. Pittman, M.D., was installed as president; O. J. Green, M.D., vice-president; H. E. Denyer, M.D., secretary.

Grady-Caddo

"Cancer of the Face and Mouth" was the topic of H. C. Dodson, Jr., M.D., associate professor of surgery at the University of Oklahoma School of Medicine, when he addressed the Grady-Caddo county society recently. New officers elected at the meeting were W. W. Davis, M.D., president; R. G. Stohl, M.D., vice-president; and B. C. Chatham, secretary,treasurer.

East Central Oklahoma Society

The East Central Okahoma Medical Society and Auxiliary recently held its annual dinner-dance at the Severs Hotel in Muskogee. New officers who were installed are: William Weaver, M.D., president; Francis R. First, Jr., Checotah, vice-president; and Charles Fullenwider, M.D., secretary-treasurer.

Tri-County

Members and Auxiliary of the Tri-County Medical, Dental and Pharmaceutical Society met in Hugo recently for dinner and business meeting. A film, "Use of Gelfoam in Surgery" was shown by Dr. J. C. Wyche, Hugo dentist.

Lincoln County

Dr. J. S. Binkley, M.D., Oklahoma City, spoke on "Treatment of Cancer" at a meeting of the Lincoln County Medical Society held recently in Meeker.

Comanche County

J. N. Mitchell, M.D., is the new president of the Comanche County Medical Society. Other new officers are Donald Angus, M.D., vice-president; and Herbert Howard, M.D., secretary-treasurer.

Pittsburg County

Dr. Howard Taylor, dean of Oklahoma College for Women at Chickasha, was guest speaker at the annual meeting and installation of officers at the Pittsburg County Medical Society in McAlester. New officers are George M. Brown, Jr., M.D., president; Richard A. Harkins, M.D., president-elect; E. D. Greenberger, M.D., vice-president (re-elected); and H. C. Wheeler, M.D., secretary-treasurer (re-elected).

LeFlore-Haskell

G. M. Hogaboom, M.D., Heavener, is the new president of the LeFlore-Haskell County Medical Society. Other officers are C. S. Cunningham, M.D., Poteau, vice-president; J. R. Rigual, M.D., Wister, secretary-treasurer.

Seminole County

Guest speaker at a recent meeting of the Seminole County Medical Society was Homer Marsh, associate dean of the University of Oklahoma School of Medicine. Claude S. Chambers, M.D., Seminole, is president; Forest Brown, M.D., is vice-president and Andy Deaton, M.D., Wewoka, is secretary.

Oklahoma County

Ralph A. Smith, M.D., Oklahoma City, was installed as president of the Oklahoma County Medical Society at the group's annual inaugural dinner-dance at the Sportsman's club. Other officers are Walter H. Dersch, M.D., president-elect; Jess D. Herrmann, M.D., vice-president; and Lewis Carroll Taylor, M.D., secretary-treasurer.

Pottawatomie County

"Coccidiodomycosis" was F. A. Davis', M.D., topic at a recent Pottawatomie County Medical Society meeting. 1952 officers of the group are Clinton Gallaher, M.D., president; E. E. Rice, M.D., vice-president; and W. M. Gallaher, M.D., secretary-treasurer.

NORMAN HADDOCK CLINIC IS MODERN MEDICAL CENTER

Constructed of red brick and Arkansas ledge stone, the new 50 by 60 foot Haddock Clinic building of contemporary design in Norman is one of the newest clinics in the state.

Built by "Dr. Jim" and "Dr. Phil" Haddock, the clinic also houses the dental offices of Dr. James A. Skinner.

Interiors, except for the reception room, are of clay tile painted in pastel shades. In the reception room the same brick as is used in the exterior makes the main wall space. In addition to the reception room, both doctors have consultation rooms, two adjoining treatment rooms, center for minor surgery, recovery room, laboratory and drug room and x-ray room.

Located just inside the doorway of the reception room is an electrically lighted aquarium displaying a variety of colorful fish.



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ANNOUNCEMENTS

OKLAHOMA ACADEMY OF GENERAL PRACTICE, Tulsa Hotel, Tulsa, Oklahoma, March 17 and 18.

AMERICAN COLLEGE OF PHYSICIANS, Cleveland, Ohio, April 21-25.

OKLAHOMA STATE MEDICAL ASSOCIATION, Oklahoma City, Oklahoma, Municipal Auditorium, May 19-21.

CHICAGO MEDICAL SOCIETY CLINICAL CONFERENCE, Palmer House, Chicago, March 4, 5, 6, 7, 1952. Complete program will be mailed upon request.

AMERICAN COLLEGE OF CHEST PHYSICIANS, Congress Hotel, Chicago, Illinois, Juue 5 through 8, 1952. Robert M. Shepard, M.D., Tulsa, serves as governor of the college for Oklahoma.

COLLEGE OF MEDICAL EVANGELISTS, postgraduate assembly, March 2-4, 1952, Los Augeles.

SIXTH ANNUAL SYMPOSIUM ON FUNDAMENTAL CANCER RESEARCH, of the University of Texas M. D. Anderson Hospital for Caucer Research, Texas Medical Center, Houstou, April 25 and 26. All meetings will be held at the Shamrock. Further informatiou may be obtained from William O. Russell, M.D., 2310 Baldwin Street, Houston 6, Texas.

SECOND NATIONAL CANCER CONFERENCE, Netherland Plaza Hotel, Cincinnati, Ohio, March 3-5, 1952. For further information write Brewster S. Miller, M. D., Director, Professional Education Section, American Cancer Society, Inc., 47 Beaver St., New York 4, N. Y.

INTERNATIONAL COLLEGE OF SURGEONS, Regional meeting, Tulsa, Oklahoma, Mayo Hotel, March 28, 1952. Andre B. Carney, M.D., Tulsa, is chairman of the meeting.

BOOK REVIEWS

ANTIBIOTIC THERAPY by Henry Welch, Ph.D., aud C. N. Lewis, M.D.; The Arundel Press, Inc., 1951.

This book presents a concise, systematic, and clinically oriented guide to the whole field of antibiotic therapy. The available preparations and the susceptible diseases are brought together in specific aud concrete detail. Dosage and vehicle of administration are given specific attention. Coutraindications, complications, and side reactions are discussed. Alternative forms of therapy are shown but the rationale for each alternative is demoustrated. Experimental work is described so that future developments may be evaluated, but emphasis is always upon the clinically proven and therapeutically effective. The danger of the development of resistauce strains is discussed iu detail. The incidence and future of allergic and other undesirable side reactions are tabulated and explained.

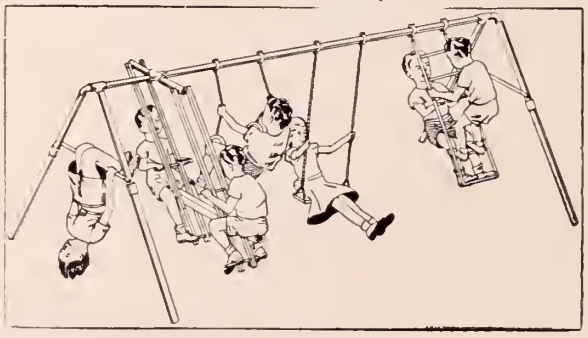
This book is recommeuded to the reading medical public (in a preface) by Chester S. Keefer, M.D., who is the Chairman of the Committee on Chemotherapy of the National Research Couucil.—J. W. Morrison, M.D.

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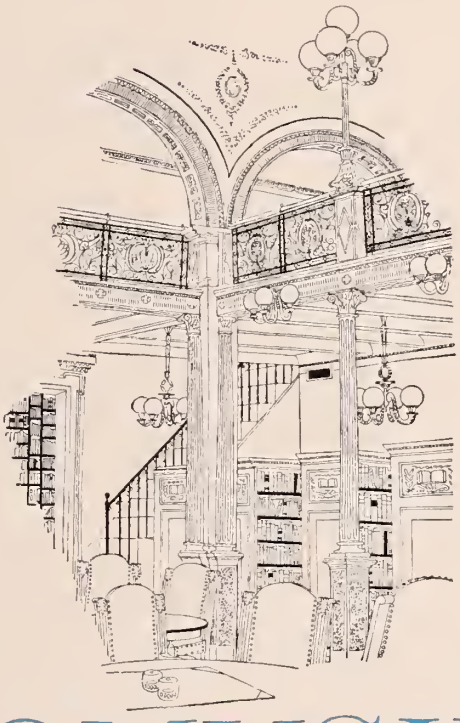
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THE JOURNAL
of the
OKLAHOMA STATE MEDICAL ASSOCIATION

EDITORIALS

The editors welcome letters from readers. The Journal is yours. Why not let the Editorial Board know what you think of it. Your comments, whether favorable or unfavorable, may be helpful.

MR. TRUMAN'S FACE SAVING COMMISSION NO MASK TO THE MEDICAL PROFESSION

There is no way to disguise the fact that Mr. Truman has been defeated in his campaign for socialized medicine. This forthright editorial statement from the *New England Journal of Medicine*[1] is commendable.

"Mr. Truman's statement that in view of the present world crisis it is particularly important that the drain on the nation's strength through illness and death should be limited need not be regarded as calling attention to a matter that is in itself critically urgent. The health of the nation is constantly improving, and the mortal stroke of death, which comes once to each, has been more and more delayed, with or without federal intervention."

Unfortunately, the editorial closes with the following comment, the wisdom of which, in the light of present world conditions and Mr. Truman's past performances with reference to medicine, is open to question.

"The appointment of a well balanced, unprejudiced commission to study the health needs of the nation is a logical way of bringing further emphasis on his determination to seek expert advice, and he should receive the fullest co-operation from organized medicine."

If Mr. Truman were really concerned about health, happiness and length of life he would devote all his spare time day and night to his Korean war and the wolves snarling at us from the four corners of the world. How can a sane man with the love of humanity in his heart, take a moment's time off to worry about a profession which has survived all fallen races and civilizations, always functioning well when not handicapped by government control. Medicine, now at an all time peak of efficiency never approached by any system of nationalized medicine, in comparable nations, is constantly striving to meet the needs of a changing world.

People have been freed from slavery by love of humanity but never enslaved by it. Please, Mr. Truman, won't you have your love of humanity assayed and let the pure gold be spread on the sore places in the world and not on the healthiest medical service in history. Medicine is now making every effort to take care of your politically perturbed home front and your suffering soldiers on the Korean battle line.

We could mention many other problems within the government's purview that are much more urgent than medicine. For the transfusion of constitutionally questionable schemes tending toward the welfare state you have bled the Constitution until it has become too anemic to further resist the needling of your judiciary doctors in the Supreme Court and an extravagant Congress. If this devitalizing raid on the blood (Constitution) of our Founding Fathers continues without help from the Supreme Court and the United States Congress, the logical doctors for a sick government, it will take more than a Truman appointed commission to save medicine. Under Hitler and Himmler Germany developed *Doctors of Infamy.*[2]

If through further devitalization of the Constitution we are forced to accept the welfare state, scientific medicine will be done for and coercion will destroy the art of medicine.

Apropos these remarks the following is arresting:[3]

"It seems to me that those who contrive and serve to change our form and methods of government by devitalizing the Constitution are as much engaged in overthrowing the Government as alien and domestic fanatics who plot to overthrow the government by a violent revolution.

"The effective power to revive the Constitution rests in the Congress of the United States, since the Supreme Court has largely abnegated its independent power of judg-

ment in its recent deference to the judgment of Congress as to what powers the Congress can and should exercise. If the people of the United States desire to revive the Constitution and to restore to themselves its protections of individual liberty and the power of self-government, they can and should demand that every candidate for the House of Representatives or the Senate of the United States pledge himself to support the Constitution of the United States as it was written and as it was enforced for nearly one hundred and fifty years."

1. "National Health Commission," New England Journal of Medicine. 246:2:72-73 (January 10) 1952.
2. Doctors of Infamy. Alexander Mitscherlich, M.D. and Fred Mielke. Henry Schuman, New York. 1949.
3. "Should We Revive the Constitution?" R. Richberg. American Bar Association Journal. 38:1:87 (January) 1952.

THE WELFARE STATE

Now that the Labor movement in Great Britain has defeated its own cause and that the annulling influence of six years of devastating misrule makes it difficult even for Mr. Churchill to stem the tide the change of climate wrought by the welfare state is very depressing.

Though lank and lean the people must continue to go hungry and the members of the medical profession without initiative must remain slaves to two masters — the Ministry of Health and the patient with all the dis-service and confusion that have arisen through a cold impersonal system.

Why cannot the U. S. government take notice and heed the warning? As long as the administration is hell bent on the road to socialism, physicians who love freedom must stand ready to fight, not for medicine alone but for principles inherent in the rights of all the people and necessary for the survival of free enterprise.

LET US PRAY

In this year of 1952, wilt Thou remember all the people throughout the land who look with hope and faith to those who practice the art and science of healing and safeguard them against the designing agencies and the evil expediencies of obsessive-compulsive champions of power in government who would place them under a certain form of slavery and destroy the traditions of medicine which stand for the intimate relationship of patient and physician in the private sanctuary of their mutual interests in the office, in the home or in the hospital and Lord, be merciful to all, professional and non-professional, who have no convictions and help them to see this honeycoated threat to their freedom in its true light, and to realize the danger of indifference and inaction.

MEET OUR CONTRIBUTORS

Coyne H. Campbell, M.D. and *Harold G. Sleeper, M.D.*, both of Oklahoma City, have a paper in this issue on "Socialism and Psychopathy." Doctor Campbell was graduated from Rush Medical College in 1928. His one year rotating internship was spent at St. Mary of Nazareth Hospital in Chicago. He served a two year residency in psychiatry at Traverse City, Michigan and Fort Supply. Doctor Campbell is a fellow of the American College of Psychiatry and has been certified by the Board of Neurology and Psychiatry.

Doctor Sleeper was graduated from the Texas University Medical Branch in 1945 and interned at Harper Hospital, Detroit, Michigan. After his internship he was on detached service at the V. A. Hospital, Waco, Texas, until June 10, 1948. He was a captain.

Maurice J. Capehart, M.D., Tulsa, attended Northeastern State College at Tahlequah and was graduated from the University of Oklahoma School of Medicine in 1944. His paper, "Present Day Methods Concerned with Relief of Intractable Pain," appears in this issue. He served a nine months rotating internship at University Hospital in urology, and a four year residency at Chicago Memorial Hospital and University, Illinois. During World War II he served 10 months in the navy as a Lt. (J.G.)

Vernon D. Cushing, M.D., Oklahoma City, wrote the paper on "Present Day Use of Antihistamines with Special Reference to the Use of Chlorcyclizine Hydrochloride (perazil) in the April Journal. Doctor Cushing was graduated from the University of Kansas School of Medicine in 1937. He interned at Ancker Hospital in St. Paul and served a residency in internal medicine, two years, and pathology, one year at Syracuse University, New York, and the University of Oklahoma. He is a member of the American College of Physicians and the American College of Allergy. He spent 48 months in service and was a major when released from service.

Karl E. Jones, Tulsa attorney, has a paper on "The Good Country Doctor" appearing in this issue. Mr. Jones' son, a brilliant young physician, decided to do general practice and located in Michigan. He practiced only a short time when a polio epidemic came. The young man gave many hours every day to this dread disease waiting on his patients. Eventually he, too, was stricken and lived only three days. His son was graduated from the University of Oklahoma.

Special Article

PRESENT DAY METHODS CONCERNED WITH THE RELIEF OF INTRACTABLE PAIN*

MAURICE P. CAPEHART, JR., M.D.
TULSA, OKLAHOMA

The clinical aspects of constant pain with the progressive development of irritability, apprehension, depression, and ever greater emotional response to all unpleasant circumstances, is indeed a distressing situation for both physician and relatives. It is undesirable to resort to the use of narcotics in stupefying doses for the relief of such pain when the duration of life may be several months or years. Because of this discouraging situation, considerable attention has been directed toward more effective methods to alleviate the suffering of patients who are victims of constant pain. Extensive investigations of the anatomical pathways concerned with the various pain circuits, together with studies relative to the physiological mechanisms of pain have contributed to the logical approach to this problem. Although much is still to be desired, methods of dealing with intractable pain have been devised which offer relief to patients who had previously been doomed to spend their remaining days in pain or under the influence of narcotics. As in any other problem of clinical medicine, it is imperative to carry out a thorough examination and to determine, if possible, the cause of pain. If the cause can be discovered, one is better able to plan the proper procedure for relief of pain. The factors of principal concern in deciding the most beneficial and most applicable measures to employ in alleviation of unbearable pain are the nature of the lesion responsible for the pain, the life expectancy of the individual, the presence or absence of narcotic addition secondary to pain, the psychic state of the patient and certain other considerations, such as the age and general physical condition.

Surgical procedures employed for the relief of pain consist of two general groups. Those in which the pain conducting pathways are interrupted, and those in which the anatomical circuits concerned with the reaction of the patient to pain are interrupted. The observation by Freman and Watts that prefrontal lobotomy resulted in relief of pain led them to suggest this procedure for intractable pain in 1945, and opened the way for the widespread use and favorable recognition this operation has attained.

Bilateral prefrontal lobotomy is undoubtedly the most consistently effective method of alleviating intolerable pain that has been devised to date. This statement is supported in large measure by the wide range in character of pain for which lobotomy will afford relief. It is of signal importance also that in the frequent instances in which drug addiction has occurred as a result of pain, the necessity or desire on the part of the patient for continuation of the drugs will in the majority of instances, be eliminated.

The conditions for which bilateral prefrontal lobotomy is generally advocated are inoperable malignancy, and those cases in which the pain is widespread so that a local approach is not feasible. Other conditions, such as post herpetic pain and the pain of tabes dorsalis, occasionally require lobotomy. It is also occasionally necessary to resort to lobotomy because other methods have failed to afford relief. This is particularly true in those cases in which drug addiction has occurred. Although lobotomy is quite effective as a means of relieving pain, it is undesirable to employ this procedure except in certain definite situations, such as those previously mentioned, because of the alteration of personality which follows. The personality change will vary with the individual's basic personality pattern, but in general, certain changes occur consistently. These changes consist of an attitude of indifference or lack of concern, lack of sufficient interest in a given project to enable its completion, defective planning, loss of drive and energy, increased appetite and loss of inhibition. A manner of quietude, monotonous tone of voice and childish responses to various situations are often seen. These fairly constant changes may undergo considerable

*Presented before the General Session at the Annual Meeting of the Oklahoma State Medical Association, May 23, 1951.

variation with the passage of time. It is probably this alteration of the basic personality pattern with modification of the patient's reaction to pain that permits him to be more comfortable, rather than loss of pain perception. It has been repeatedly observed that lobotomized patients retain pain perception and react by crying out or withdrawal from painful stimuli. The reaction to pain is radically changed, however, as evidenced by absence of apprehension, anxiety, emotional disturbances, fear or requests for pain relieving medications. When asked if they have pain, the response is usually in the affirmative, but no evidence of concern or preoccupation with pain is manifest. Narcotics may be withheld immediately after surgery in the majority of cases. If withdrawal symptoms occur, reduction in dosage and frequency of administration may be carried out and eventually stopped altogether. In properly selected cases, bilateral prefrontal lobotomy is a very gratifying and effective measure in combating intractable pain.

Other procedures which have the effect of altering the reaction to pain are unilateral prefrontal lobotomy and topectomy. Several experiences of favorable results with unlateral lobotomy have been reported. This procedure has the advantage of less interference with personality structure and could logically be viewed as a two stage operation in that the intact side could be sectioned at a later date if the unilateral approach failed to bring about the desired result. Also, the surgical risk is decreased. Advocates of this procedure have suggested that it is more effective in pain that it not expected to increase in intensity.

Topectomy is a procedure which is designed to alter the effect of both psychic and organic pain. It consists of excision of the cerebral cortex in the prefrontal region. The amount of cortex removed varies with the choice of the individual doing the surgery. Those who advocate topectomy, maintain that it is a less mutilating procedure than lobotomy and that the personality modification is less marked and of shorter duration. Unilateral topectomy in conjunction with unilateral lobotomy has been proposed and carried out. Proper evaluation of the effectiveness of these procedures will require more extensive investigation and an accurate statement relative to their individual or collective merits cannot be made at this time.

Procedures which are of value in relief of pain by reason of interruption of pain conducting pathways include section of one or both spino-thalamic tracts in the thoracic spinal cord, section of the spino-thalamic tract in the high cervical region or mesencephalon, sensory nerve root section, peripheral nerve section, sympathectomy and trigeminal tractotomy. Medullary trigeminal tractotomy may be combined with section of the posterior roots of the upper cervical nerves or cranial nerves.

Cordotomy is the term commonly applied to the procedure in which the lateral spinothalamic tracts are severed. This is usually done at the second or third thoracic level and may be unilateral or bilateral. If the pain is bilateral or there is any possibility that it may subsequently be bilateral, both spino thalamic tracts should be sectioned. In the event of bilateral cordotomy, the incisions into the cord should be made at slightly different levels in order to lessen the possibility of interference with vascular supply to the cord. Section of the spino thalamic tract results in loss of pain and temperature sensation on the opposite side of the body without interference with other modalities of sensation. The level below which pain and temperature will be lost may be expected to lie between the nipple and costal margin. Cordotomy is advocated for intractable pain located below the level of the nipple except in conditions such as post herpetic neuralgia and the pain of tabes dorsalis. These exceptions are mentioned because of the view of some authorities that such pain may be of thalamic origin. Cordotomy probably is not the procedure of choice if the level of pain does, or may eventually extend above the nipple. High cervical cordotomy and section of the spino-thalamic tract in the mesencephalon may be done to obtain a higher sensory level, but these procedures are highly technical and the mortality rate in most hands may be alarmingly high. Cordotomy may be expected to result in failure when narcotic addiction exists and in certain cases in which the patient is aware of the existence of an inoperable malignancy so that his apprehension, anxiety and preoccupation with the knowledge that he is soon to die are of equal or greater concern than his pain. Lobotomy should be proposed in either case.

Mesencephalic tractomy has been done for pain involving the head and body on the same side since the secondary trigeminal

tracts and the spinothalamic tracts are closely apposed in the brachium of the inferior colliculus. Theoretically, this procedure might be expected to relieve many types of unilateral head pain, however, as has been mentioned, the operative mortality may be quite high, the post-operative course stormy, and the experience in the use of this operation has been relatively limited.

Section of sensory nerve roots, or posterior rhizotomy, is indicated in situations where pain is well localized, particularly in the trunk area. It must be borne in mind that there is a wide overlap of sensory dermatomes and in order to bring about relief, the affected nerve, as well as one above and one below must be severed to allow for this overlap. This procedure results in loss of all sensation over the dermatome distribution of the involved nerves, but does not interfere with motor power. It is not advisable to completely destroy the sensory supply to the extremities because of the serious incapacitation of patients, due to loss of position sense. Such a procedure is rarely indicated.

Radicular pain must be regarded as a symptom of a number of independent lesions such as inflammatory diseases of the meninges, tumors, trauma of the vertebra, arthritis and primary virus diseases. In radicular pain that is well localized about the trunk, and conforms to a dermatome pattern, posterior rhizotomy may be expected to offer definite benefit. The postherpetic pain of herpes zoster and phantom limb will not be relieved by this operation.

The pain of trigeminal neuralgia and the neuralgia involving the glossopharyngeal nerve are both effectively relieved by section of the sensory roots of the fifth cranial nerve for trigeminal neuralgia and the ninth cranial nerve for glossopharyngeal neuragia. Refinements in technique have made it possible to do a differential section of the sensory roots of the trigeminal nerve so that preservation of sensation to a given area may be successfully maintained while section of the fibers in the distribution of the pain is carried out. In this connection, it is rarely desirable to preserve sensation in any division other than the ophthalmic branch. Preservation of some of the fibers of the ophthalmic division is of great importance since many complications as a result of denervation of the cornea may occur.

Alcohol block of the various branches of the trigeminal nerve is an effective temporary method of relieving the pain of trigeminal neuralgia and is advocated by many as the procedure of two factors, namely: to acquaint the patient with the feeling of numbness that follows interruption of sensation to the face and to establish the diagnosis in cases where any doubt exists. Alcohol block is a temporary measure and should in most instances be followed by resection of the posterior roots of the trigeminal nerve when the pain recurs. In the rare instances of bilateral trigeminal neuralgia and glossopharyngeal neuralgia, certain considerations are necessary. These will be discussed subsequently.

Peripheral nerve section may afford considerable relief in traumatic lesions resulting in incomplete severance of the nerve with formation of scar tissue about the nerve. Such changes are likely to result in more or less continuous severe burning pain and variable tingling and numbness. Often the skin in the involved area will be glossy, red and dry. In other cases, there may be profuse sweating. This clinical picture has been termed causalgia. The median and tibial nerves are most often affected but similar circumstances may prevail in other peripheral nerves. When such a lesion is present, the nerve should be freed from the scar tissue, the neuroma, if present, resected and an end-to-end suture carried out. In certain cases, however, resection of the nerve does not relieve causalgic pain. In this event, block of the appropriate sympathic ganglia with novacain should be done. If this brings about relief, the injection may be repeated or resection of the sympathtic ganglia may offer permanent relief.

Painful neuromas in amputation stumps are often seen. In the event of invòlvement of the neuromatous ends in dense scar tissue, considerable irritation of the nerve results. If novacain injection relieves this pain, resection of the nerve at a higher level and injection of alcohol into the nerve 3 or 4 cm. above the resected end is advocated. In addition to local pain about the amputation stump, the phenomenon of phantom limb is frequently seen. In either case, the treatment as a whole has not proven satisfactory. Sympathetic block at times afford relief and in such instances, resection of the appropriate sympathetic ganglia is probably indicated. Cordotomy and posterior rhizotomy are not effective in these syndromes. Favorable results with lobotomy have been reported.

Sympathectomy has been mentioned in connection with causalgia and phantom limb. The pain of angina pectoris may be relieved by alcohol block or removal of the upper four thoracic sympathetic ganglia. This is an effective method of relieving anginal pain, but the feeling of substernal oppression persists as a reminder that the functional capacity of the heart is being overdrawn. Since many patients with anginal pain have advanced coronary disease, resection of these ganglia can be performed in relatively few cases. In experienced hands alcohol injection of these ganglia will afford effective relief, at least temporarily.

Relief of intractable pain of the upper abdominal viscera by section of the splanchnic roots has been reported. When such a procedure is contemplated it is necessary to determine the visceral sensory fibers involved, and to investigate the effect of paravertebral novacain block of the ganglia through which the pain pathways are transmitted. Such conditions as biliary or hepatic pain may be relieved by resection of the right splanchnic fibers and pain of renal origin may be relieved by resection of the sympathetic fibers in its pedicle. Proper clinical evaluation from the standpoint of pathology and expected response to the usual measures of treatment, is of course, a primary requisite.

Resection of the superior hypogastric plexus has been advocated for intractable pain of dysmenorrhea in carefully selected cases which have failed to respond to proper gynechological measures. This operation is effective only in pain which has its origin from the body of the uterus and is not effecfrom the body of the uterus and is not effective in pain originating from the cervix, broad ligaments, tubes or ovaries, and has no direct effect on the pain from the bladder.

In various conditions resulting in pain about the head and neck, section of the descending root of the trigeminal nerve in the medulla alone, or in conjunction with section of the posterior roots of the upper cervical nerves is useful. In 1938, Sjogvist demonstrated the feasibility of destroying the pain bearing pathways coming from the face by severing the descending root of the trigeminal nerve in the medulla oblongata, a procedure called medullary tractotomy. The procedure has the advantage of destroying pain about the face but leaving touch perception, preventing dysesthesias and avoiding nerve paralgesic keratitis, seen at times when the classical retro-gasserian operation is done.

The major interest in this procedure is a method of relief to offer patients with malignancy about the face and neck, as this surgical exposure also allows the surgeon to severe the glosso-pharyngeal nerve which has its sensory supply to the nasopharynx tonsillar pillars and eustachian ostia, as well as to sever the posterior roots of the upper cervical nerves. This operation has been used extensively in relief of trigeminal neuralgia but it is not as certain to obtain relief as direct section of the preganglionic portion of the trigeminal. In trigeminal neuralgia, this procedure is of great value in the fairly rare case of bilateral trigeminal neuralgia, as eating is virtually impossible with touch bilaterally lost in the mouth and the possibility of bilateral section of the fifth nerve exists.

Of more importance, however, is the recent use of the concept that the pain fibers of the face from the trigeminal nerve, the pain fibers from the nasopharynx from the glosso-pharyngeal nerve, the vagus which sensory limb to the external auditory canal and sensory twig from the facial nerve to a small area back of the ear all descend in the descending root of the trigeminal in the medulla. Here, then, is a method of relieving pain in a person with malignancy about the auditory canal, the middle ear and the nasopharynx, if well lateralized, as well as the face. Many of these lesions are of low grade malignancy and life expectancy may go into years. This operation is not advocated until local surgical and radiological techniques have proven fruitless. Great caution again must be exercised by the physician regarding narcotics. This operation is valueless if narcotic addiction exists. It is also valueless in trifacial pain of tabes, Horton's "so-called histaminic or vasomotor cephalgia," in postherpetic neuralgia of the rigeminal and in migraine cephalgia.

It is the only procedure that can be used in the rare bilateral glossopharyngeal neuralgia as severing both the glossopharyngeal nerves will paralyze the initiation of the swallowing reflex.

An evaluation of the patient's emotional situation in relation to his lesion is most important. This is especially true in neoplasia. If the patient is emotionally unhinged over his plight, or addicted, lobotomy must then be considered.

PRESENT DAY USE OF THE ANTIHISTAMINES WITH SPECIAL REFERENCES TO THE USE OF CHLORCYCLIZINE HYDROCHLORIDE (PERAZIL)*

VERNON D. CUSHING, M.D.
OKLAHOMA CITY, OKLAHOMA

Since 1910, the role of histamine in the production of various allergic states has been vigorously debated. Many enthusiastic reports, from 1924, have been presented supporting the theory that histamine was the substance primarily responsible for the manifestations of allergic disease. This controversy over the role of histamine has continued until fairly recently. It is generally accepted now that anaphylaxis is due to the combination of antigen with antibody within the body cells which are thereby damaged. The resulting symptoms may be due, in part, to this damage and, in part, to the release of histamine, histamine-like substances, and other substances of which heparin is probably one.[1]

The knowledge that histamine apparently plays an important part in anaphylactic and allergic phenomena has led investigators to find a way to block the effects of this product. Methods which were utilized had as a common denominator competitive action, in that the activity of the agents was in the form of competitive attachment to the cell reactor, and thereby displacing or replacing histamine.[2]

It is not the purpose of this paper to present the mechanism of antihistaminic action. Suffice it to say that there is considerable doubt as to the actual mechanism and that in addition the antihistamines do not counteract all of the actions of histamine. Neither is it the intent to present to you the variation in the structural formulas of the antihistaminic drugs or discuss their chemistry other than to say that most of the antihistaminic agents which have found the widest clinical use in the United States are derivatives of dimethylaminoethane.

In 1942, Halpern described a new compound, Antergan, which was extremely active against histamine produced asthma. This epoch-making communication was followed, particularly after the war, by efforts on the part of the drug companies to produce newer and more effective antihistamines. As a result, the drug market was flooded by a mass of antihistamines, many of which had the same basic formula, but different names, and each being lauded as being the best. Unfortunately, due to misuse of the drugs as well as to unwarranted claims, as is so often the case with new products, this led to early enthusiasm and ultimate disappointment for their use in many conditions, the most outstanding example of which is bronchial asthma.

The clinical trial of Antergan was carried out for the greater part in Europe. Benadryl (Diphenhydramine Hydrochloride, Parke-Davis) was the first antihistamine to be widely used in the United States. Benadryl is a derivative of enthanolamine and its release on the market was soon followed by a parade of antihistamines, most of which were derivatives of ethylenediamine, such as Pyribenzamine, (Tripelennamine Hydrochloride, Ciba), Neo-Antergan, (Brand of Pyrilamine Maleate, Merck), Neohetramine, (Brand of Thonzylamine Hydrochloride, Nepera) and Histadyl, (Thenylpyramine, Lilly) to mention a few of the more widely publicized forms. The more recent types of agents were derivatives of aminopropane, such as Trimeton (Brand of Prophenpyridamine, Maleate, Schering), and Chlor-Trimeton, (Chlorprophenpyridamine, Maleate, Schering), and a product developed by Burroughs Wellcome, Perazil, (Chlorcyclizine Hydrochloride).

A recent (April, 1951) perusal of the literature reveals that there are at least 38 antihistamines which are in common usage at the present time. Many of these 38 agents are derivatives of the same chemical formula. An announcement has recently been made of a new antihistamine soon to be distributed to the medical profession by Wyeth, detailed under the name of Phenergan. This is a derivative of phenothiazine. Considerable experimental work has been done on this compound, although it has not been on the market long enough to determine the clinical results which will be obtained. This product was studied by Halpern and Ducret in 1946,

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who reported that it was seven times more potent than the antihistamines with which it was compared, with approximattly three times the duration of action. The marked side reaction, however, of drowsiness with this compound, of which Wyeth warns, might limit its use.

The 1950 edition of "New and Non-Official Remedies" lists nine preparations which have been accepted by the Council of Pharmacy and Chemistry of the American Medical Association. The statements given with regard to the histamine-antagonizing agents are, of course, conservative and many of the recent preparations which are effective are not listed in the 1950 edition.[3]

With the advent of the antihistamines it was felt that the answer to many problems of allergic disease had been found but as previously mentioned, this has not proven to be correct and many of the conditions which were first thought to be adequately controlled and handled by their use have been shown now to be poorly controlled. Part of this is due to the fact that the antihistamine itself may not be suitable in the condition from the outset, while in other cases the use of the antihistamines for a while appears to give some control of symptoms only to have these effects lost after continued use.

At the present time it is believed that the most effective use of antihistamines is in mild seasonal allergies involving the nasal passages, such as mild seasonal hay fever. It is not as helpful in the perennial type of hay fever. Other conditions in which the antihistamines may be found to be useful are the acute urticarias, occasionally itching dermatoses, angioneurotic edema, serum sickness, and occasionally mild reactions from antibiotics or sulfonamides. It also has been used to some degree with varying success in headaches known to be due to the ingestion of protein to which the individual is sensitive. Their use in controlling the itching of chicken pox and athlete's foot has been reported as well as their use in certain diseases of the central nervous system such as Parkinsonism, although for this condition the derivatives of belladonna are still the drugs of choice.

Spasmodic cough in children without evidence of asthma oftimes is relieved by the use of antihistamines. Topical applications of certain compounds may afford relief in itching skin conditions such as atopic dermatitis and contact dermatitis and occasionally will be helpful in pruritis ani and vulvae. Meniere's syndrome has at times been found to be partially controlled by the use of these preparations.

Unfortunately, there has been no antihistamine prepared that is without some side reaction. And still more unfortunately, it appears that those antihistaminic agents which are the most potent in clinical use appear to carry the highest percentage of side reactions. This is particularly true with the compound, Benadryl. While Benadryl is probably one of the most useful antihistamines, it produces side reactions in a large percentage of the patients. At the other extreme, a product such as Neohetramine, also a short-acting antihistamine, is not accompanied by the high percentage of side reactions, but also does not control the allergic condition for which it is being used as well as Benadryl.

The side reactions, or toxic manifestations, which may be listed for the antihistamines may be divided into those involving the central nervous system, the GI tract, the skin, and the hematopoetic system.

The side reactions involving the central nervous system are the most prominent, the most common of which is the effect of sedation. The sedative factor may be used to advantage in some patients, particularly when the drug need be given only at night. It is useful in children where the syrup or elixir form may be used and beneficial effects obtained from both the specific action of the antihistamine as well as its sedative effect. This side reaction, however, can be very disturbing to the individual who requires the use of these drugs during the daytime and great caution should be used until each patient's tolerance for the medication is determined. This is particularly true with people who drive or fly.

Other central nervous system manifestations may be listed as nervousness, jitteryness, hyperexcitability, insomnia, marked weakness and lethargy, incoordination, and occasionally coma and convulsive seizures, these latter usually resulting in patients who have received an overdosage. Occasionally a patient will complain of tinnitus or blurring of the vision following the use of antihistamines. Nausea and vomiting are not uncommon along with occasional diarrhea.

Some patients develop an acute urticaria while taking an antihistamine and it is not uncommon to see urticaria made worse or

the manifestation of a skin allergy be accentuated by the use of the antihistaminics. Care should be exercised in the application over a long period of time of topical ointments and creams containing antihistamines as they can act as sensitizing agents, occasionally with detrimental results.

There have been a few reports in the literature of coma and convulsions followed by death, but in practically all of these case reports there was evidence of overdosage. This accentuates the danger of leaving antihistaminic agents in reach of children. Many of the preparations are carried in a syrup or elixir form and are quite palatable so that occasionally a child will consume a large amount of the antihistamine with deleterious effects.

Their use in chronic asthma has been disappointing. In the acute seasonal asthma, particularly in childhood, an antihistamine will at times be of temporary value as it is in seasonal hay fever; however, the bentficial effects of any one antihistaminic usually wears off fairly soon. While shifting to another antihistamine may give once again some temporary relief, the usual course is for all to eventually become worthless in treating these conditions over a long period of time.

It is well agreed upon at the present time that these agents should be used merely as an adjunct for temporary relief while the individual is obtaining proper and thorough treatment for the underlying cause of the allergic disorder.

The use of antihistamines in the treatment of the common cold should be briefly mentioned. While reports on their effectiveness in the treatment of the common cold are still being published, the concensus of most investigators, who have done thorough work on this subject with adequate controls, is that the use of antihistamines alone or in combination with the coal tar derivatives has no specific action against the virus responsible; nor will their administration abort or shorten the course of the common cold.

The more recent preparations of the antihistaminic agents appear to have a more prolonged action with lower incidents of side reactions. One example of these is Perazil (Chlorcyclizine Hydrochloride, Burroughs Wellcome & Company). In an attempt to study the effectiveness of Perazil in obtaining temporary relief in seasonal hay fever a group of patients were studied using varying doses of Perazil ranging from 50 mg. to 150 mg. in divided doses daily.

METHOD

Thirty-five cases of seasonal hay fever were selected during the Spring, Summer, and Fall of 1950. These patients had never received specific therapy for their hay fever in the form of hyposensitization. Some had received various antihistamines for temporary relief at different times. All patients were thoroughly investigated and were found to have pollinosis due to inhalants characteristic of that season in which they were seen. The symptoms of the 35 patients varied from mild to sereve with 25 or 71.4 per cent being classified as moderately severe. A routine procedure of hyposensitization was instigated and in addition Perazil was prescribed for temporary relief. The 35 patients were initially placed on 50 mg. of Perazil daily. Those patients who obtained only slight or no improvement were given increasing amounts of Perazil. No patient received more than 150 mg. daily.

RESULTS

Table No. 1 tabulates the degree of relief obtained by the 35 patients while receiving 50 mg. of Perazil daily.

Table 1 Perazil 50 mg. Daily

Condition	No. Patients	%	Side Reactions	%
Complete Relief	1	2.9	0	0
Marked Improvement	5	14.3	0	0
Slight Improvement	13	37.1	1	2.8
No Improvement	16	45.7	1	2.8

Of the 35 patients 29 or 82.8 per cent received only slight or no improvement. Twenty-six of these 29 patients were instructed to take 50 mg. of Perazil twice daily, a.m. and p.m., or a total of 100 mg. daily. The results are shown in Table No. 2.

Table 2 Perazil mg. 100 (mg. 50 b.i.d.)

Condition	No. Patients	%	Side Reactions	%
Complete Relief	3	11.6	0	0
Marked Improvement	9	34.5	0	0
Slight Improvement	8	30.8	0	0
No Improvement	6	23.1	2	7.7

Fourteen of 26 patients obtained no relief or only slight relief while on 100 mg. daily. These 14 patients were given 150 mg. of Perazil daily in divided doses of 50 mg. three times a day. The results are shown in Table 3.

Table 3 Perazil mg. 150 (mg. 50 t.i.d)

Condition	No. Patients	%	Side Reactions	%
Complete Relief	2	14.3	1	7.1
Marked Improvement	5	35.7	0	0
Slight Improvement	4	28.6	0	0
No Improvement	3	21.4	2	14.2

As can be readily seen from the above tables the increased amounts of Perazil were well tolerated, and also a higher percentage of patients obtained improvement while receiving 100 and 150 mg. daily.

The percentage of side reactions was small being only 5.6 per cent in those patients receiving 50 mg. daily and 21.3 per cent while receiving 150 mg. daily. The most common side reaction was one of drowsiness but in only one case was it necessary to discontinue the use of the drug because of the presence of this side reaction.

SUMMARY OF CONCLUSIONS

1. The Antihistamines are useful adjuncts to be used in certain allergic disorders.
2. In these conditions they have not proven to be useful to the point of replacement of conventional therapy such as hyposensitization.
3. Their use may be followed by good results in mild hay fever or in acute urticaria.
4. It may be necessary to try more than one antihistaminic agent, as while a patient may not react well to one, a good response may be obtained by using another type.
5. The beneficial effects of the antihistamines and oftimes dissipated with prolonged administration.
6. Side reactions are not uncommon, particularly those involving the central nervous system, and patients should be carefully observed until knowledge of tolerance is obtained.
7. Perazil (Chlorcyclizine Hydrochloride), in a dose range of 100 to 150 mg. daily, is an effective antihistamine with a low incidence of side reactions and may be used with beneficial results in seasonal hay fever.

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PATIENTS POLLED ON OPINION OF ASSISTANTS

Over 200 physicians were selected by the Public Policy Committee to assist in a survey made by the Oklahoma County Medical Assistants Society in an effort to determine the public's attitude toward the physician's assistant. Each physician was furnished five copies of a questionnaire together with stamped self-addressed envelopes for their return to the Editor of THE STETHOSCOPE, a bi-monthly publication for medical assistants. These questionnaires were given by the 200 physicians to five of their patients who were asked to complete the questionnaires in a forthright and candid manner. Deadline date for return of the questionnaires was set for March 15.

According to Violet Nayphe, Editor of THE STETHOSCOPE, at press time returns had already been received from patients all over the State of Oklahoma . . . Miami, St. Louis, Muskogee, Okmulgee, Clinton, Enid, Bartlesville, Waynoka, Tahlequah, Tulsa, Oklahoma City, and we've even gone over the line into Texas to receive one from a "visitor" to our state who reports that she "would not want to improve over the way" her doctor's assistants "are with all his patients—old and young. They especially are kind and understanding with the children."

The three questions included on the questionnaire were.

1. What is the manner and attitude of your physician's medical assistant when you approach her in the office or contact the physician's office by telephone with an inquiry or problem?

2. In what way is she or could she be more sympathetic, interested, tolerant, and understanding?

3. What was your reaction to a situation that perhaps was amusing, embarrasisng, or provoking?

Mrs. K. B. of Ada writes that in her doctor's office there are always so many people waiting that "it's very amusing to listen to their problems, also aches and pains . . ."

Mrs. J. B. of Henryetta reports that her physician's assistant "seems friendly, courteous and congenial. Sometimes she is very impersonal and aloof—yet not too cold to make one feel uncomfortable." And just as a preview of what also is in store for the physician, Mrs. J. B. writes that "it would take such a few seconds" for the doctor himself to give her "shots" since the medical assistant "always leaves a black and blue mark on me days later. The doctor doesn't . . ."

The information received from this "Survey of Service Rendered by Medical Assistants" will be carefully reviewed and tabulated and the criticisms and suggestions will be digested for a later complete report.

SOCIALISM AND PSYCHOPATHY*

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A discussion of such a subject, socialism and psychopathy, must begin with the statement of a hypothesis of comparison in which concepts of socialism may be held side to side with concepts of psychopathy. By socialism these statements refer to current American sociopathy; and by psychopathy, they refer to the constitutional inadequacy found in certain people who lack a basic sense of responsibility.

1. In socialsim there is an attitude of regard for the rights of the individual which serves to protect the individual in wrong doing often at the expense of the society.

In psychopathy there is a marked diminution and sometimes a complete lack of conscience which helps to exploit these "rights" of the individual.

2. In socialism there is the attitude that the capitalistic culture discriminates unfairly against certain groups, with the end result that these certain groups feel justified in disregarding cultural authority, to achieve their own ends.

In psychopathy there is a disregard for all current cultural authority, with the feeling that this cultural authority discriminates against the psychopath.

3. In socialism there is the belief that crusaders against those who have money will be rewarded by political power.

In psychopathy there is the inherent faith that rebellious and aberrant behavior will be rewarded by personal success.

4. In socialism there is the belief that parents and other people with biologically invested authority have been cruel and are incompetent in their management of the developing child, and therefore "benevolent society" should supplant and improve on family functions.

Psychopathy is characterized by the attitude that any sort of opposition springs from poorly oriented people such as parents or police, and therefore such opposition should be ignored as incompetent and irrelevant.

5. In socialism there is the belief that society, before socialism, is to blame for everything that creates problems for the individual.

In psychopathy excuses are found to avoid individual responsibility for immorality by the statement that "society is to blame."

6. In socialism the goal ultimately to be achieved is that each individual will be more free and more equally participating in the material and spiritual wealth of the country.

In psychopathy the virtues of sharing are extolled at length if the psychopath might gain by the sharing.

7. In socialism the evils of governmental inadequacy and extravagance may be condemned by the socialists but not remedied.

In psychopathy we find a social behavior condemned by the psychopath himself, if by this condemnation he can lessen or avert punishment. Although socialism is possible in theory, the biological characteristics of psychopathic individuals will make such a socialism lead to a *loss* of personal freedom for the majority, and possibly to a dictatorship for our country. The only possible check in this situation is for those not hynotized by the glitter of the ultimate goal, to assert themselves and proceed on the basis of reality itself.

The current attitude of those who believe that society is to blame for the aberrant behavior of so many of its members is a most interesting orientation.

In our opinion the popularity of the concept, "there is no such thing as a bad child," has become a challenge to the survival of our democracy. There has been such a spread of this dictum that an individual's health and social adjustment is dependent upon adequate parental love; that some of us have begun to be somewhat concerned about the stability of those who advocate this propaganda. This blame upon parental authority has been so prevalent in the press that many parents of juvenile delinquents and parents of psychopaths are ready subjects for exploitation by pseudo-clinical

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psychologists, psychic analysts, sociological counsellors and possibly in some instances, by medically licensed psychoanalysts.

Those who pose as having the ability to cure these behavior disorders and thereby become accepted authorities on the subject, will certainly be well recompensed for their services, since the parents feel the sting of guilt, under the accusations that little or big Johnny's behavior disorder is the result of parental attitudes and behavior. These parents will pay anything to relieve this sense of guilt. In socialism the "take" of this exploitation can be even greater if society in general can be convinced that it is to blame for all of the juvenile and adult delinquency herein.

Two examples taken from many among my private practice* are as follows: The first one is a patient, age nine, who suffered with convulsions. A very careful examination by neurologists and neurosurgeons failed to elicit any organic pathology. The patient was sent to a child psychoanalyst. The patient was subjected to this psychoanalytic technique for several months. Summer came along and the analyst was to go to Europe for vacation. The analyst told the family that the analysis was at a most important phase and suggested that the child be taken to Europe with her to avoid an interruption of this most important technique. The parents were just about ready to accede when someone suggested that there was an analyst near their home who could continue the treatment. Thus the patient came to me. It was my experience with this patient that initiated my present orientation to psychiatry. I have never seen parents in greater distress. Both the father and mother were suffering with a reactive depression arising from their conferences with the "analyst." They had been told that the child was having convulsions because of inadequate love during infancy. Both parents were well adjusted people, successful in social life, and progressive citizens of the community. They had another older daughter who was a very healthy child, but they got the blame for the patient's convulsions because they had not properly managed the "sibling rivalry." I was a young physician then and in an open minded attitude I accepted the patient for analysis. The contents of her conversation with me had, of course, already been influenced by her former analyst. I actually considered the possible validity of the previous interpretations until the first convulsion witnessed in my office. That was enough for me. I called her father and requested that she be re-examined by a neurosurgeon and air encephalogram performed. The father objected because an air encephalogram had been done already a year or so ago. I insisted that it be repeated. It was done, with the result that a large brain tumor was removed from the left frontal lobe.

*—CHC

Although convulsive attacks do not necessarily mean that a brain tumor exists, I think that it is most unfortunate that parents can be subjected to such harassing accusations by people in any profession.

The same applies to the parents of patients suffering with asthma, hay fever, epilepsy, urticaria, rheumatic fever, fractures, coronary occlusion, peptic ulcer, spastic colitis, constipation, arthritis, cancer, high blood pressure, and any other afflictions for which a specific cause remains unknown .

We think that it is most presumptuous for physicians who have been auto-hypnotized, and conditioned by a technique of having a trainor seated behind a couch to feel specifically qualified to place the blame for an illness on a parent or social group.

The second case is that of a man, 37 years of age, who is a bricklayer suffering with severe alcoholism. He has been drinking excessively for 10 years. He is one who refuses medical care, and who becomes phychotic under the influence of alcohol. I am reporting the pertinent conversational components of my interview with his mother and father:

Mother: "Doctor, what have we done to cause our boy to be this way? I am sure that it is our fault. The books and newspaper columns say so, and I want you to tell us what to do to correct the situation. I'm sure that it is our fault, at least that is what our friends say, and I feel so guilty that I don't know what to do."

Father: "Doc, he's been a lone wolf all of his life. He built a cave when he was about eight years old and slept in it night after night."

Doctor: "I just want you to know that I am not in the business of exploitation. It is my opinion that you as parents, so far as environment is concerned, had nothing whatsoever to do with your son's alcoholism."

Mother: "Doctor, ever since he was able to talk he would say, 'I know mom, you say that you love me, but I don't think that you do. You love sister more than you do me; you don't love me.' Doctor, that made me tense, and honestly as a result John has gotten more love and attention from me and his father than have our other four children combined. Yet, these other children are married, happy, and by the way, we are expecting another grandchild next week."

Father: "We never once punished John physically because as I said, he was a 'lone wolf' from infancy. However, he was a brilliant student in school, and you can go to his town today and find that even though he is drunk most of the time, people will say that he is a wonderful person. This is in the face of the facts that he has divorced his wife and has three children whom I am supporting."

Mother: "He threatens to kill all of us when we deprive him of whiskey, yet when his attention is called to the fact that he drinks too much, he says that he rarely drinks to excess at all."

Doctor: "This is the same as when he told you that you did not love him when he was a child, even though you were expending more love upon him at the time than you were upon your other children."

Mother: "I'd like to tell you a great deal more about him and his attitudes. I remember when he was 15 years old. We went to church every Sunday. When he was 15 he joined the church. After that he laid on the bed on his stomach for three days without food or drink. He seemed to be in a daze."

Doctor: "It is obvious that your son is a schizoid personality who obtains some relief of distressing symptoms by ingestion of alcohol. As of the present the schizoid personality is not understood, but I for one am not convinced that his *infirmity* is your fault."

The important point to be made here is that the patient was an individual with antisocial propensities from a very early age. The history of the case does not indicate that he would have been different in any sort of spontaneous social environment.

It is always difficult for the parents to accept the ultimatum. As a rule the middle aged father, in tears, refuses to accept the reality regarding his recalcitrant child and says to him, 'You have always had your way, and now you have triumphed again.' The child has once more escaped being forced to mend his aberrant behavior, as not even the psychaitrist can make him change.

This same lack of effective treatment applies for the symptoms of homosexuality, pathological lying, some drug additions, other types of sexual abnormalities, abnormal gambling, kleptomania, and other juvenile and adult criminal behavior.

The statement by the father quoted above must be borne in mind. As announced to his recalcitrant. You have always had your way and now you have triumphed again.' by paraphrasing this statement we have the theme of socialistic political philosophy. "Let us give them their way and we can be elected again!" But there is another side to this picture. Something happens to many of these human beings and this something is far removed from the influence of environment. It is the call of the atavistic reality—the biological drive for survival and personal happiness at any price. This drive may bring them into great conflict with their fellow man.

Now just what does this have to do with socialism and psychopathy?

These people who develop antisocial behavior, according to our increasingly prevalent sociological, psychoanalytical, and political orientation, are being considered as "mental cases and sick folks" and often escape responsibility for deliberate crimes. Such people born with the quality of "you don't love me enough," by virtue of their exploitative potentialities often become socialists and communists.

Maybe this is inevitable as a part of biological reality. Maybe this is a part of the cycle of human relationships. Maybe it is inevitable that there are going to be more born socialists, psychopaths, and semi-communists than there are competitive individuals. If so, then so be it. It has happened on the world before.

It would seem possible that a person with socialistic philosophy is a grown up child who as an infant had the attitude toward his parents, "You don't love me," despite all efforts of the parent to the contrariwise, and it would also seem that such an attitude was endogenous.

A democratic culture can survive up to a saturation point of such people. After the saturation point is reached, a dictatorship is precipitated. The desire of the psychopaths to escape personal responsibility is thereby

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carried to its conclusion and all responsibility is concentrated in one man. The matter of internationalism with the United Nations, is therefore a sort of diplomatic indulgence of postponing the inevitable by exalting the "rights" of psychopathic nations. When a state, states, or even the World governments become sufficiently saturated with enough of the grown up children who in infancy said to the loving parents, "you don't love me," then war of one kind or another will occur.

Most people do not realize that competition is a biological characteristic fundamental to the behavior of mankind. This blindness to reality serves to perpetuate socialism and communism.

The refutation of the concept of phychopathic personality by psychoanalysts and by communists, and the denial of the Mendelian Law by Lysanko is evidence that our culture is now standing upon an interesting threshold,—who knows? Maybe the Dark Ages are again upon us.

Maybe this is an inevitability, but if so, you can be sure that it is biologically determined, and that there will be another Gallileo in the future to say that "Truth crushed to earth will rise again."

Now, to continue with the subject, socialism and psychopathy. The psychopath is a specimen of biology who has an excessive amount of disregard for others, including his parents. There is no standardized measure of this disregard other than the reaction of *those who do have regard* for others, against the destructive behavior of the psychopath.

Is it morally appropriate for physicians who are confronted with the litigious problems of criminals to say that psychopaths are undoubtedly variants of scizophrenia or severe psychoneuroses? When a legally insane person indulges in devastating antisocial behavior, the County Attorney is usually convinced of this fact (the insanity) by lay people, who are competent witnesses.

If psychiatrists have assumed the role of responsibility for morality, so as to be able to deny that such an entity as psychopathic personality exists—so as to blame the aberrant behavior of juveniles and adults upon society — this could only mean that such phychiatrists think that they have a formula for a perfect socity. It would obviously call to mind the "perfect society" as suggested previously by the Nazis and currently by the Soviets. Plato wrote the New Republic before Christ was born.

It would seem that any who would so ignore the fascination of change in the realm of biological reality have been captivated by the illusion of biological stasis.

There is a communistic, a psychoanalytic and a socialistic contention that a properly controlled environment would have changed the outcome of anti-social children. This contention supposedly justifies a deluge of social workers to take care of family problems. Once again we hear the accusation, "You don't love our children or society enough," you must share your possessions to prove this love and affection.

Such is reflected today as the greatest problem of our American democracy. Social Security, unemployment compensation, and old age pensions are manifestations of a social psychopathy.

The American politicians are now confronted with the problem "Shall we go ahead and bankrupt the country in order to be elected, or shall we let our successors have the honor?" Mind you, there is the question, —"What else can we do?"

In answer, we can turn from the psychotic orientation of Stalin and Lysenko. We can return to the reality of biological conditioning. The mutations and changes of our biological nature should be enough to contain our interest as it has done in the past. We have had the experience of living through the thrills of the steam engine, the gasoline engine, electricity, electronics, the x-ray, the airplane, the telephone, the radio, television, antibiotics, cinematic entertainment, luxury by gadgets, freedom of speech and the privilege of arguing about religion and politics. We have survived all of the changes of philosophy that these experiences have necessitated. We must not succumb to a single philosophy evolved by the socialistic psychopaths of our time.

It is most important even for the United Nations to become aware of the fact that in the end, regardless of the philosophy that is dominant, the culture will be determined by biological and ecological reality.

Like Old Man River, biology will keep rolling along. Our problem is to choose between sitting on the bank to observe and discover and acquire some happiness, or to try to divert the stream, thereby ignoring the forces that will push the stream back, perhaps to destroy us in the flood that we have helped to create.

THE GOOD COUNTRY DOCTOR

KARL E. JONES

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The first doctor I remember in our home was Doctor Gilley. There had been others, including the one who attended my little brother Frankie with such tragic results. My memory goes back in personal recollection about 54 years. However, Doctor Gilley had been around long before that. When I was three or four I suffered from bronchitis, and Doctor Gilley was called in often when I had a "spell." Until I was about seven I rarely ever got outdoors in the winter time, and folks would say—"Little Karl is delicate, he has bronchitis." As a consequence I was rather tenderly nurtured during these years, and not being too dumb I took advantage of my delicate condition on many occasions. Later I outgrew the ailment and thereby lost much of my amateur standing because of regaining my health.

Doctor Gilley was a tall man. He wore a full beard and a long black coat. All doctors wore beards then, or tried to. Even when I was four Doctor Gilley seemed a mature man, and that was in 1897. About 1943 I had to procure a birth certificate for business reasons. Of course, none was on file back in 1893, so I had to get some affidavits and other evidence to get my certificate issued. I had heard that Doctor Gilley was still living in Ottawa, Kansas, and was about 96 years old. On a hunch, I wrote a lawyer in Ottawa, asked him to check on the rumor that Doctor Gilley was still there, and if possible get the affidavit from him. I didn't expect anything to come of it, but right away back came the doctor's affidavit, and this story:

Yes, Doctor Gilley, still living, and at 96 years was loafing around the office of his son who was an M.D. He wasn't practicing any more. When the lawyer told the doctor of my request and gave the date of my birth, Doctor Gilley went to his safe and got his book for 1893, flipped the pages to May 10, and sure enough it told all about me making a four point landing on that date. The signature on the affidavit was a little shaky, but entirely legible. Stern was the stuff of which our early doctors were made—going around making affidavits at the age of 96 years. I salute Doctor Gilley and all the rest of those pioneer practitioners.

With seven children who seemed to be natural incubators for all childhood diseases, Mama had to be pretty handy with medicine herself. We had a big doctor book, and it didn't gather dust on the shelf. Mama was deathly afraid of dipththeria and the croup. She could hear one of us give a croupy bark in the night and boy, how she went into action. Membranous croup was the fear of all parents then, and Mama never waited for the second gurgle. She dosed us with Pine, Honey, and Tar medicine, greased us good with lard and turpentine, and if we didn't show some signs of improvement quick, got the little vapor lamp and a sheet. If things were no better by morning, she called in Doctor Gilley. I remember how the good doctor always carried his medicine with him. He usually left two kinds and they were put in separate drinking glasses. When you were given one kind, they laid the spoon on top of that glass to show which one you had already taken.

Mama always dreaded our having the measles. Once a new doctor came to town, and she heard he claimed he could cure the measles. However, Mama was cagey. She called him in on some simple ailment for one of us kids, and then asked him about his meales cure. He said, "Yes, Mrs. Jones, I can cure the measles." Boy, had he stuck his neck out! Mama took this statement of a cure literally, as she knew Philip was due for a bout with the measles before long. Philip hadn't met up with those particular germs as yet, but he never failed to catch everything that was going around. Sure enough, he did break out good and plenty a few months later, with as fine a looking rash of measles as I have ever seen. Mama called the new doctor. He didn't seem quite as cocky as he had been when she first asked about his cure. He said his medicine didn't always work but he could sure help a lot. Mama didn't like that statement, but told him to go ahead. He gave Philip the nastiest tasting pills we ever had in our home. Philip raised sand, but we held him down and gave him his medicine. We expected the measles to leave overnight, but they didn't. Mama said later that Philip had the worst case of measles she had ever seen.

She sure was off that new doctor, and we always had Doctor Gilley for all our sickness after that.

I don't remember how much the good doctor charged my Dad per call—I think it possibly was $1.50, day or night—but I do know he always came, and in a hurry too, if someone was bad sick. He drove a snappy pair of little buckskin trotting horses, and they could step right along. Doctor Gilley always seemed quite calm, but he could move fast for a big man. He never said anything against the "home doctoring" people did in those days. Lard and turpentine, applied warm, was a standard home remedy for croup and colds; a piece of fat meat tied over a rusty nail puncture was the preventive and cure for tetanus and lockjaw. Chewing tobacco would stop bleeding, and tobacco smoke blown in your ear was a sure cure for earache. Clove oil was fine for toothache, and heaven forbid, I forgot to give full credit to the asafetida bag. This evil smelling and noxious herb was worn about the necks of children to ward off all kinds of disease. I guarantee that a hot schoolroom on a winter day, well filled with perspiring children wearing asafetida bags, would knock out and cripple any germ that dared enter, from chickenpox to yellow fever. Old Doctor Gilley took all this in his stride and kept right on doctoring folks when they called him, day and night.

When I was born Doctor Gilley had raised his fee to $10.00, and Dad didn't like it a bit. Of course as I grew a little and looked more human Dad couldn't help but see what a pretty baby I was turning out to be. I heard later that he made this remark to Mama, "Well, Rose, that's a lot of money for Doc Gilley to charge us for little Karl, but the tiny rascal may be president some day, so I guess it is worth it." Mama didn't say anything but just went on changing my diaper. However, I seem to remember that she looked at me with a real tender light in her eyes. Mama sure took good care of her children.

As I remember the old faces in Ottawa, Doctor Gilley's kindly whiskered visage is always there. He was really a town institution and people sure swore by him, even though they didn't always pay him. He must have had a great heart in his bosom to have worked so long and tirelessly, helping us through our calamities of accidents and sicknesses. He is one of that vanishing race of great men who placed their power to alleviate suffering above the almighty dollar, and the material things of life. I can only pay him this highest tribute by saying: He is one of two great doctors I have known in my time; I place him alongside a hollowed shrine I will always keep fresh in my heart. His kindly visage is there beside that of my wonderful young doctor son. My own dear boy, who as he stood so eargely at the threshhold of a brilliant career said to me, "DAD, I WANT TO SERVE HUMANITY."

Plan to Attend the Annual Meeting

OF THE

OKLAHOMA STATE MEDICAL ASSOCIATION

MUNICIPAL AUDITORIUM OKLAHOMA CITY

May 19-20-21, 1952

THERAPEUTIC CONFERENCE

THE PHARMACOLOGICAL TREATMENT OF COUGH*

H. A. SHOEMAKER, PH.D., Professor of Pharmacology
University of Oklahoma School of Medicine

"Cough is a symptom and not a disease. It is not necessarily a disadvantage and should not always be arbitrarily suppressed. This particularly applies to the so-called productive cough, which is a compensatory process of nature for removing secretions that otherwise would accumulate to the disadvantage of the patient. Cough is often a valuable diagnostic sign, either indicating the presence of some pathological process or by its character giving clue as to the identity of the disease. While it may be an aid in some cases, in others it does not serve a useful purpose and may markedly interfere with the comfort and well being of the individual. It may be of such violence as to cause damage by exhausting the patient, causing pain and interfering with rest and sleep. Very often it is more desirable to modify the character of the cough than it is to suppress it entirely."[1]

A continuous secretion of mucous is necessary to keep the air passages moist. There is as is usual with mucous membranes, a secretory mechanism which is influenced by the drugs affecting the autonomic nerves. The parasympathomimetic drugs are seldom used in the treatment of a dry respiratory tract mucous membrance. Pilocarpine is mentioned in the older literature, but is not recommended today because of its many undesirable effects. Atropine may be used to diminish excessive secretion, particularly when this is due to an overactive parasympathetic. In the thoracic respiratory passages, we find elaborate and ingenious mechanisms for the removal of secretions and particles of foreign material. First, there are the cilia, which we find in the trachea and bronchi, excluding only a short length of the terminal bronchioles. Under normal circumstances the cilia are able to deal with the mucous which is secreted. The rate of movement of a foreign particle by cilia is about 1 inch per minute, and they are effective under favorable circumstances to bring material from the deepest bronchioles to the throat in a few minutes. The movement is affected by the viscidity of the secretion and in the case of foreign substances the size of the particles. Under conditions which produce irritation of the tracheal and bronchial epithelium, there is an increased ciliary activity, but since the secretion under these circumstances usually is viscous, the effectiveness is diminished. Drugs are not particularly effective in regulating the activity of the cilia. Some agents used in therapeutic mixtures may depress.

A second mechanism for the removal of secretion from the lungs is the peristaltic movements of the muscles of the smaller bronchi. Gunn[2] states that, A definite peristaltic movement of the bronchial muscle as contrasted with the mere alteration in tone of this muscle is supposed to be a property especially present in the muscle of the finer bronchi. Where cough and cilia fail, this peristaltic movement takes their place." Gordonoff[3] doubts that peristaltic movements as such play any role in the removal of secretions from the deeper recesses of the lung. Any changes of tone are closely associated with the respiratory movements, and the constriction and dilation during expiration and inspiration work the material out to where the cilia can pick it up and move it to the throat where it may be swallowed or expelled by expectoration.

A third mechanism for the removal of secretions and foreign matter from the respiratory tract is the coordinated reflex known as cough. Cough is an exceptional and reserve mechanism. Cough is a signal that something is irritating the "cough center" in the medulla. The stimulus may come from one of the branches to the vagus (meningeal, Arnold's Branch to the lobule and external meatus of the ear, laryngeal and superior laryngeal, cardiac, pulmonary, esophogeal, pericardial and gastric) or from the phrenic. Brown[4] describes the act of coughing as follows: "When the respiratory mucosa is irritated by congestion, exudate or for some other reason the nerve fibers transmit the impulse to the respiratory center and the rather complex act of coughing is excited. Deep inspiration occurs, the glottis

*A discussion given to third and fourth year students at the School of Medicine as a part of Therapeutic Conferences. These conferences are held each Monday at 4:00 P.M. and are attended by the upper classmen in the School of Medicine, interns, residents, and other physicians. Any physician is welcome to attend and participate. The conferences are conducted under the sponsorship of the Department of Pharmacology.

closes and forced expiration is made. When the pressure becomes great enough to open the glottis, the sudden change in pressure is attended by the expulsion of a blast of air which characterizes the cough." If mucous or exudate or some foreign particle is in the trachea or bronchiols it may be drawn deeper into the lung during the inspiration. It has been demonstrated that particles and infection can be carried from one part of the lung to another. If a bronchiol is plugged by mucous, the pressure (200 mm Hg[5]) created during coughing may drive the plug deeper, or since the forces of inspiration are greater than those of expiration, air may be drawn past the plug or forced past it during the increase of intrapulmonary pressure, become entrapped and produce emphysema. The valve action of the mucous plug may also prevent air from entering the area and thus produce atelectasis. The expulsive effect of cough is greatest near the larnyx, in the glottis, as can be seen from the table, adapted from Rohrer,[6] which gives the velocity of air in different parts of the lung.

AIR VELOCITY IN DIFFERENT AREAS OF LUNG

	Relative Velocity	Ordinary Respiration M/Sec.	Maximal Respiration M/Sec.	Coughing M/Sec.
Glottis	3.39	3.0 - 5.0	21.0 - 35.0	50. - 120
Trachea	1.	0.9 - 1.5	6.0 - 10.0	15. - 35
Right Bronchus	0.9	0.8 - 1.3	5.6 - 9.0	13. - 32
Bronchus (6 mm.)	1.64 - 1.76	1.4 - 2.6	10.0 - 18.8	24. - 62
Bronchus (2 mm.)	0.28 - 1.25	0.25 - 1.8	1.7 - 13.0	4. - 44
Lobar Bronchus	0.35 - 0.72	0.3 - 1.1	2.2 - 7.0	5. - 25
Intra Lobular Bronchus	0.08 - 0.166	0.07 - 0.24	0.5 - 1.7	1.2 - 6.
Bronchiol	0.035 - 0.072	0.03 - 0.11	0.22 - 0.74	0.5 - 2.5

ACCORDING TO ROHRER

When one considers the velocity of the air through the glottis for instance, 50-120 meters per second (112-268 miles per hour), we can see why Fantus[7] said that coughing may become part of a vicious circle, for violent coughing irritates bronchial tissue and such irritation leads to further coughing, which may continue indefinitely unless the vicious circle is checked by appropriate treatment of the cough.

A fourth mechanism whereby secretions are removed from the respiratory tract is by posture. We ordinarily do not think of this factor, but it is rather important. It becomes exceedingly important when we have a condition in the pulmonary tract, whereby we have an undue amount of secretion. Postural drainage accounts for the so-called "morning cough." During the night, on account of the recumbent position, mucous which may accumulate in the more dependent portions of the lung during the day, drains to the point where it produces the irritation necessary to start the complex of coughing. The individual then coughs until this mucous is removed and when this has been accomplished the cough ceases until further drainage of mucous sets off the reflex.

Fantus[7] classifies coughs into three categories: "Tight," "Loose" and "Insufficient." Brown[4] groups coughs into four distinct types: The hacking, irritative unproductive cough; the "tight" cough with scanty or tenacious sputum; the wheezy squeaking cough, which may be either dry or productive; and the "loose" cough with abundant sputum. For the purpose of discussing treatment I have used a combination of these classifications: The dry, irritative, unproductive cough, which most frequently is a result of a dryness of the mucous membranes in the throat but may also result from dryness in the trachea and bronchi; the "tight" cough with scanty and more often a tenacious sputum; and the "loose" cough.

In the treatment of the dry irritant cough, the first consideration is the use of water to moisten the mucous membrane. The water is to be used by ingestion and by inhalation. The administration of an expectorant cough medicine will be of little or no value when the patient is suffering from dehydration. Therefore, be certain that the patient has plenty of water to drink. The inhalation of water vapor often gives prompt relief in the dry nonproductive cough. Keeping the relative humidity of the room high, about 65, is better than the intermittent inhalation of the vapor from a boiling kettle. Medication of the steam is not important except psychologically. A teaspoonful of Tincture of Benzoin to about two quarts of water heated to the steaming point gives a pleasing odor and may make "medicine minded" individuals more conscientious in carrying out the instructions.

If the dryness is in the throat, demulcent drinks, hard candies, and syrups are usually soothing and can be used to advantage. Expectorant drugs of the reflex or nauseant type also can be used to advantage. Those

most frequently used are Syrup of Ipecac, and Antimony and Potassium Tartrate. The Syrup of Ipecac in doses of 0.3 cc. every three or four hours alone or in combination with one of the other expectorants, is often effective in the acute laryngeal, tracheal and bronchial inflammations, particularly in children. Syrup of Orange and Syrup of Tolu Balsam are good vehicles for Syrup of Ipecac. Antimony and Potassium Tartrate is the most active expectorant component of compound Opium and Glycyrrhiza mixture (Brown mixture). Other expectorant drugs of the nauseant type are seldom used today. These drugs act reflexly by their effect on the mucosa and in some instances, e.g., ipecac, there is also a direct central action. Since they are efficient emetics, they must not be given too frequently nor in too large doses, because of the danger of producing emesis.

In the "tight" cough with scanty and tenacious mucous, ammonium chloride is probably the drug of choice. It causes the mucous to become more fluid and may increase the quantity. It is said to produce its effect reflexly by irritation of the gastric mucosa. The effect from a single dose is of short duration and it must, therefore, be given at rather frequent intervals. A good dosage schedule is 0.3 gm every two hours during the acute or subacute inflammatory stage. Good vehicles for ammonium chloride are: Syrup of Citric Acid, Syrup of Cherry and Elixir of Glycyrrhiza. I prefer the Syrup of Cherry, although nothing actually masks the taste of the ammonium chloride. Ammonium chloride is not indicated in the more chronic stages when the sputum has become more abundant and easier to raise. The amount of ammonium chloride in proprietary preparations is usually too small to be effective.

The treatment of the more chronic types of cough involves the use of the so-called stimulant expectorants. Brown[4] states that, "They tend to lessen the mucous and exudate and the hyperemia caused by them may aid the healing process." Fantus[7] states that, " 'Stimulant' expectorants are aromatic bodies that owe their virtue to elimination from the bronchial mucous membrane. Given in sufficient dosage, they possibly tend to favor healing by producing a curative hyperemia. They must not be given early in a case of acute bronchitis, as they may cause recurrence of the sense of soreness in the chest and of the difficulty of expectoration." The compounds most frequently used are creosote carbonate, guaiacol, and terpin hydrate. Creosote carbonate may be administered in ascending doses beginning with 0.3 gm. and increasing gradually to 1 gram every four hours, suspended in milk. Most patients object to the taste and some of the proprietary preparations containing creosote as such or calcium creosotate can be used to advantage. Cass and Frederik[9] found that the proprietary preparation "Robitussin" containing glyceryl guaiacolate was quite satisfactory from the taste standpoint and the therapeutic results were very good. The recommended dose is 4 cc. every three hours. They found that it produced a marked increase in respiratory tract fluid in cases of chronic bronchitis. Terpin hydrate is an effective agent but there is not enough in the official Elixir of Terpin Hydrate to do much good. When Terpin Hydrate is indicated as in chronic cough with excessive liquid sputum it is best to give the drug in capsules, 0.12 to 0.3 gm., three or four times a day. The official Elixir of Terpin Hydrate is an excellent vehicle for administration of codeine.

In the chronic cough with a fairly large amount of thick sputum, the iodides serve a very useful purpose. They should not be used in acute conditions for Fantus[7] states that, "Iodide is the most powerful agent available for producing hyperemia and exciting secretion of the respiratory mucous membrane." It is a very effective solvent expectorant due in part to the stimulation of secretion and in part to its well known peptizing action. It is best administered in rather small doses and at short intervals. Syrup of hydriodic acid in 4 cc. doses every three or four hours is a rather pleasant form of medication. Potassium Iodide is the simplest form. It may be prescribed as a saturated solution and administered in 0.3 cc. doses in milk after meals. It can also be prescribed in Syrup of Tolu Balsam or Syrup of Pine Tar. It should not be prescribed in any case of suspected tuberculosis because of the danger of its increasing the activity of the disease.

When the cough has become "loose" therapy can as a rule be discontinued. It is only when the expectoration (respiratory tract fluid) becomes excessive or has a tendency to persist that treatment needs to be instituted. In a condition which Fantus[7] calls the "insufficient cough" the amount of bronchial secretion exceeds the coughing powers

so that mucous accumulates in the chest. Under these circumstances it may become necessary to increase coughing rather than stop the cough. Increasing the depth of respiration may be of considerable help. Diminution of secretion by the judicious use of atropine is often of considerable value. Aid in draining by posture is exceedingly important. The use of liquefying expectorants is contra-indicated and checking the cough by opiates or other sedatives is disastrous.

The "anodyne expectorants," those that depress the cough reflex, must be used with a great deal of caution. In a bronchial or pulmonary infection the cough is one of the physiological processes used to maintain drainage. The cough reflex should be depressed only when the cough is not useful, when it may damage the lung or spread the infection, or when the cough is likely to fatigue the patient to the point where it can no longer serve a useful purpose. The use of codeine and other depressants of the "cough center" in the treatment of cough resulting from the "common cold" should be the exception rather than the rule.

Banyai[10] states that codeine (methyl-morphine) and dihydrocodeinone bitartrate are preferable as cough sedatives. He found that dihydrocodeinone bitartrate "Had a prompt antitussive action without interfering with the expectoration of inflammatory products." He recommends the following oral dosage: "Adults, 5 to 10 mg. three times within a 24 hour period; children two years of age or older, one-half the adult dose; younger children, one quarter the adult dose." Banyai[10] gives a number of objections to the use of morphine in the management of cough. These objections are:

"1. It depresses the respiratory center too much. Consequently, the respiratory excursions of the chest and the respiratory volume of the lung diminish. These changes, in turn, imply a decrease in the normal expansion and contraction of the bronchi. In addition, the bronchial peristalsis is slowed down. The untoward effect of such chain of events on the normal cleansing capacity of the lower respiratory tract is self-evident.

"2. Morphine diminishes the muscular tone of striated muscles, including the diaphragm. The latter is responsible for 37 per cent to 47 per cent of the ventilatory function of the lung and in a large measure for the normal cough mechanism. Weakening of the functional capacity of the diaphragm inevitably interferes with the efficacy of cough.

"3. Morphine exerts an inhibitory action on the glands of the bronchial mucous membrane. Such interference with the physiological function of the bronchial mucosa represents another handicap in the way of the normal evacuation of bronchi. Also, it is well to keep in mind that undue dryness of the mucosal surface renders it more irritable, and it is therefore liable to increase the cough.

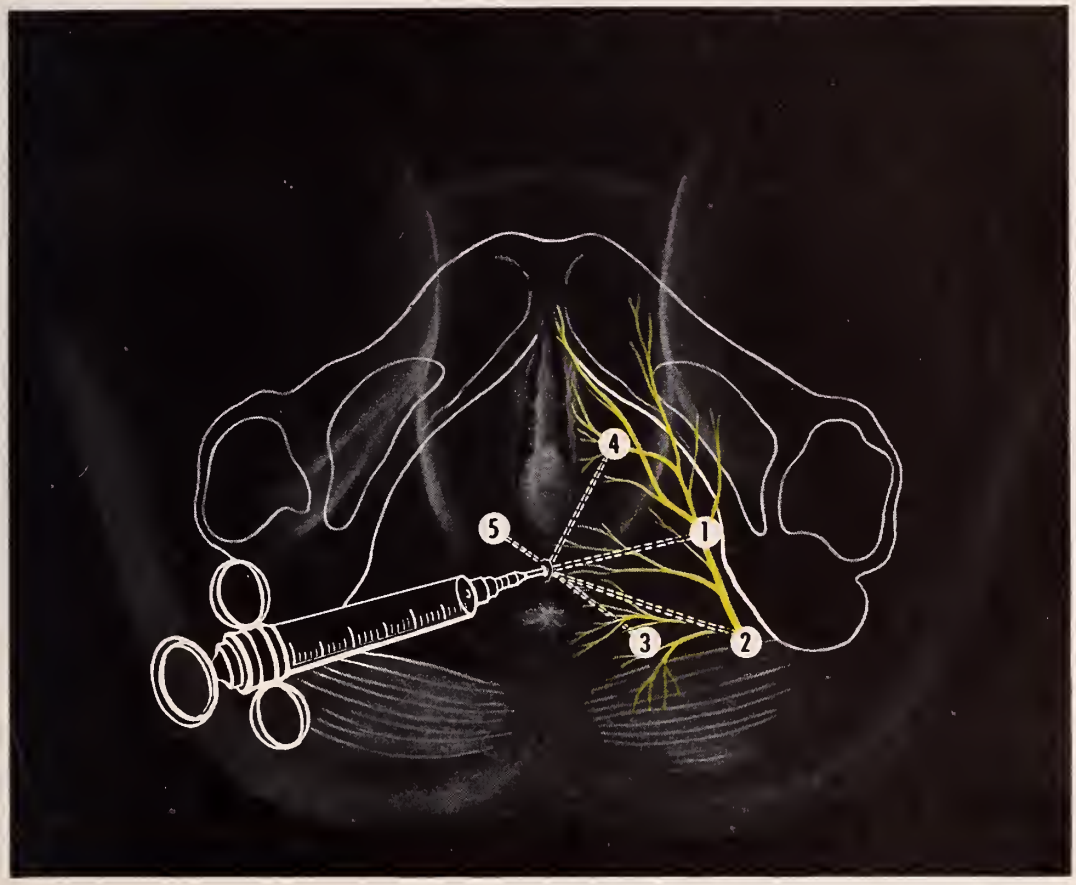
"4. Morphine causes a spasm of the smooth muscles of the bronchi and bronchioles. This, in turn, implies disturbed bronchial peristalsis (bronchial dyskinesia). The electrobronchographic studies of Lousada illustrate that the oscillations of the normal pattern disappear after the administration of morphine."

In recent years antitussive preparations containing antihistaminics have appeared on the market. I cannot see that there is an advantage in their use from a pharmacological standpoint except in the occasional allergic manifestation. They for the most part cause a drying of secretions rather than an increase in the amount of respiratory tract fluid. Their use in ordinary cough is contra-indicated because they decrease rather than improve drainage.

The proprietary preparations used in the treatment of cough must be selected with care. Many of them are "shot-gun" formulae and are designed for all types of cough rather than the specific type that the patient may have. In many we find therapeutic incompatibilities but the most serious objection is the fact that the dosage of the individual drug needed or desired is often only a fraction of what it should be to give the best results.

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Sites for injection of local anesthesia in obstetrics. Sites 1 to 4 should be similarly injected on the contralateral side. Site 5 is for episiotomy. Adapted from Johnson, O. J.: Nerve Block in Painless Childbirth, J.A.M.A. *145*:401 (Feb. 10) 1951.

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[1]Heins, H. C.: Pudendal Block with Hyaluronidase, J. South Carolina M. A. *46*:309 (Oct.) 1950.

[2]Baum, F. E.: The Use of Hyaluronidase in Pudendal Block, Am. J. Obst. & Gynec. *60*:1356 (Dec.) 1950.

ACCEPTED COUNCIL ON PHARMACY AND CHEMISTRY AMERICAN MEDICAL ASSOCIATION

RESEARCH IN THE SERVICE OF MEDICINE **SEARLE**

President's Page

Some time ago we received an inquiry as to why so many of the graduates of our medical school seem to feel that they are not qualified doctors until they have passed some specialty Board or other. Also why so many of them feel that they are entitled to compensation of ten to twelve thousand dollars from the time they start in practice. The inquirer wondered whether the school of Medicine had forgotten that its function as a tax supported institutions was to train practitioners of medicine to care for the health of the people of Oklahoma. Dean Everett was asked: "What is the School of Medicine doing to orient its students in the direction of general practice for the general population?"

In answer to this query Dean Everett makes the observation that some of the influence toward specialization and the belief that elaborate facilities are needed for practice have their origin following graduation from the School of Medicine. In other words, from the character of the training obtained during internships and residencies. Many of the students state at the time of graduation that it is their desire to go into general practice. As to specific things done by the School of Medicine in this regard we quote the following paragraph from Dean Everett's letter.

"Our school has followed the directive of the Council on Medical Education to concentrate the clinical training of students into the four general fields of medicine: medicine, surgery, pediatrics and obstetrics-gynecology. The specialties are given subsidiary positions on the training program. In addition to this basic program, the School has the following special features: a general medical outpatient clinic, a joint conference of the basic sciences, a joint therapeutic conference, a tumor clinic and a number of other joint teaching sessions between the departments. These devices emphasize the general aspects of disease rather than the specialized features. This type of teaching does a good deal to encourage the student's interest in general knowledge. There are also short courses in medical ethics and medical economics. In the hospitals, there are general pediatric and medical surveys of patients together with letters to the referring physicians, which take cognizance of the referring diagnosis. As you know, the School has also gone beyond these formal curricular changes and has introduced the preceptorship to provide direct observation in regard to general practice. We also sponsor a general practice internship."

Dean Everett feels that the University of Oklahoma School of Medicine has gone further along these lines than most other medical schools. We agree and we wish to thank him on this page for giving such a specific answer to a general and perhaps critical inquiry.

In case the reader is interested in the ideal function of a preceptor and the potential value of a preceptorship we call your attention to an article which will appear in the June issue of the Journal by a "preceptor" in every good sense of the word.

L. C. McHenry

President

During Pregnancy

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TELEVISION, PANEL DISCUSSIONS TO BE FEATURED AT ANNUAL MEETING

Slated for the Zebra Room of the Municipal Auditorium, Oklahoma City, May 19, 20, 21, the 59th Annual Meetiug of the Oklahoma State Medical Association promises to be one of the outstanding scientific meetings of this area. O.S.M.A. members are urged to make their hotel reservatious as soon as possible and a hotel reservation blank is included on this page for the conveuience of those planning to attend.

Eleven guest speakers from throughout the Uuited States and Cauada have agreed to participate in the program. Speakers and their specialties are as follows:

Howard Ulfelder, M.D., Boston, gynecology; Charles L. Martin, M.D., Dallas, radiology; Lawrence Fallis, M.D., Detroit, general surgery; W. E. Herrell, M.D., Rochester, iuternal medicine; J. Edward Berk, M.D., Philadelphia, gastroenterology; John R. Haserick, M.D., Cleveland, dermatology; Harland Crank, M.D., Houston, psychiatry; J. M. Robiuson, M.D., Houston, laryngology; Bruce Chown, M.D., Winnepeg, Canada, pediatrics; Ormond S. Culp, M.D., Rochester, urology; Walter A. Fanslet, M.D., Minneapolis, proctology.

For the first time, all scientific sessions and exhibits at the annual meeting will be on one floor. Twenty scientific exhibits will be on display and there will be approximately 68 commercial exhibitors.

House of Delegates of the Association will hold its first session Sunday afternoon, May 18 at 2:00 o'clock in the Hall of Mirrors at the Auditorium. A meeting of the Council is scheduled for Sunday morning.

Each morning from 9:00 until 10:00 procedures in the various fields of medicine will be televised from University Hospital.

Following a precedent set in the past, roundtable luncheons will be held each day with guest speakers participating. Each afternoon at 4:00 a panel discussion will be held.

The Past Presidents' breakfast will be held Mouday morning, May 19.

The Annual Dinner Dance will be an event of Tuesday evening, May 20.

Arrangements will be made for all visiting physicians who would like to play golf to do so.

A complete program for wives of physicians attending is beiug planned by the Auxiliary and will be announced in the May issue.

WATCH FOR MAY JOURNAL

O.S.M.A. members planuing to attend the Annual Meeting in Oklahoma City May 19-20-21 are urged to read the May issue of the Journal carefully.

The May issue will be devoted entirely to the annual meeting and there will be no scientifics or other reading matter published other than that pertaining to the Annual Meeting.

Complete scientific and social program will appear in that issue as well as the Auxiliary program. Biographical information ou guest speakers, list of delegates and alternates, scientific and commercial exhibitors, councilor and committee reports, and the audit report will also be published in the May Journal.

AMALGAMATIONS

The following have made application for amalgamation of county societies. All requirements have beeu met and the petitions are in order for presentation of the Council and House of Delegates:

Cherokee-Adair
Cleveland-McClain

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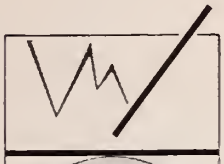
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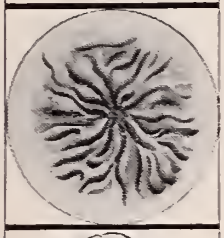
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HOSPITALS APPROVED BY A. C. S.

Thirty-seven Oklahoma hospitals appear on the annual list of hospitals approved by the American College of Surgeons. All but four of the 37 received full approval and the four received "provisional approval" indicating that for lack of time or other acceptable reasons they have not been able to put all details of requirements into effect.

With its 34th annual list, the College ends its responsibility as a single accrediting agency. The program on June 30 will be transferred to the Joint Commission on Hospital Accreditation, composed of representatives from the College, the American College of Physicians, the American Medical Association, American Hospital Association and the Canadian Medical Association.

State hospitals approved are:

Valley View hospital, Ada; Hardy sanitarium, Ardmore; Blackwell general hospital, Blackwell, (provisional approval); Chickasha hospital; Claremore Indian hospital; Clinton Indian hospital; Western Oklahoma state hospital and Western Oklahoma tuberculosis sanitorium, Clinton; Cushing municipal hospital, (provisional approval).

Federal reformatory hospital, El Reno, Enid general hospital and St. Mary's hospital and annex, Enid; Western State hospital, Fort Supply; Benedictine Heights, Guthrie; Kiowa Indian hospital, Lawton; St. Mary's, McAlester; Muskogee general and Oklahoma Baptist, Muskogee.

Norman municipal and Ellison infirmary, Norman; Bone and Joint hospital, Mercy hospital, St. Anthony hospital, Wesley hospital and the University of Oklahoma hospitals—University and Crippled Children's, Oklahoma City; Pawnee-Ponca Indian hospital, Pawnee; Ponca City hospital; A.C.H. hospital, Shawnee Indian sanitarium and Shawnee City hospital, Shawnee (provisional approval); Stillwater municipal hospital; William W. Hastings hospital, Tahlequah; Talihina medical center; Hillcrest Memorial and St. John's, Tulsa.

SON OF OKLAHOMANS' IS OUTSTANDING PHYSICIAN

An outstanding University of Oklahoma graduate is now associated with the Strong Memorial Hospital, Rochester, New York. Dr. J. Raymond Hinshaw received his B.A. from the University of Oklahoma in 1943 and his M.D., University of Oklahoma School of Medicine in 1946 and a Ph.D. from Oxford, 1951. He received the Oklahoma Hall of Fame Scholarship awarded in 1946 as outstanding member of his medical class, was awarded the Rhodes Scholarship from Oklahoma in December of the same year and completed three years of study at Oxford University, Oxford, England. He is the son of Dr. and Mrs. J. R. Hinshaw, Norman.

He was ranking junior Phi Beta Kappa at the University of Oklahoma and held a straight A average for 16 years of school work. He served as editor of the Sooner Medic and was president of his class in both his junior and senior years of medical school. In addition to his position as staff surgeon at Strong Memorial Hospital, he is under contract with the navy doing atomic medical research. He has had a number of articles accepted for publication both here and in England.

FOURTH ARMY REPORTS ON PRIORITY ONE PHYSICIANS

Fourth Army has notified the Oklahoma Vountary Advisory Committee to Selective Service the present status of Priority One physicians who have not been ordered to active duty.

There are a total of 17 Priority One physicians who have not as yet been called to duty or have applied for a commission in the military forces. A breakdown of these 17 physicians is as follows: commissioned and available, 13, of these 13, two have been deferred as essential to their community and three for personal family hardship. Four have indicated that they do not desire a commission and are now subject to induction through the Selective Service system.

McLOUD PHYSICIAN RECEIVES 50 YEAR PIN

R. C. Kayler, M.D., practicing physician at McLoud for more than 50 years, recently received the O.S.M.A. gold 50 year pin. Presentation was made by L. C. McHenry, M.D., President of the Oklahoma State Medical Association.

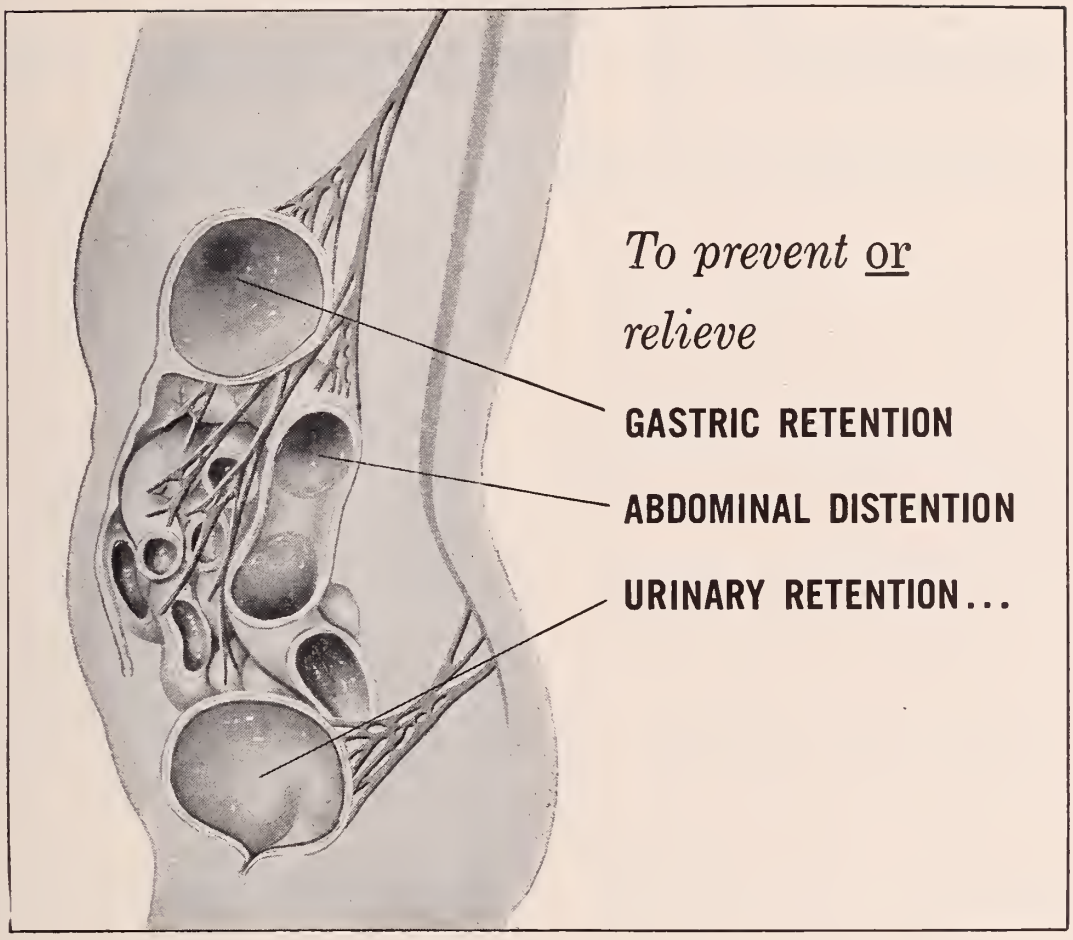
Doctor Kayler was born in Naparville, Ill., April 20, 1874. He graduated from Rush Medical College, Chicago, in 1900 and came immediately to McLoud.

He estimates that he has delivered some 2,000 babies in his community since 1900. His records, however, have been destroyed by fire twice—1918 and 1939.

Doctor and Mrs. Kayler have two daughters, Mrs. James C. Rutherford, Washington, D. C., and Mrs. J. C. Hayes, Fort Worth, Texas. They have four grandchildren.



Left, Wm. Gallaher, M.D., also a 50 Year Club Member and R. C. Kayler, M.D. show off their 50 Year Pins. Right, L. C. McHenry, M.D., O.S.M.A. President, and Mrs. Kayler admire Doctor Kayler's pin.



By reproducing the effects of parasympathetic stimulation, URECHOLINE®, administered orally or subcutaneously, prevents or relieves the distressing symptoms of postoperative abdominal distention or gastric retention in a large percentage of patients. It also has proved extremely useful in the prevention and/or relief of postoperative urinary retention and in the treatment of chronic or functional retention. Complete symptomatic relief has been produced in selected cases of megacolon.

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ANNOUNCEMENTS

COLGATE HOSPITAL OPENED; NO FEDERAL FUNDS USED

One of the newest hospitals to be constructed in the state is the Mary Hurley Hospital in Coalgate. Fully furnished and completely equipped, the hospital is all paid for and was not financed even in part, by Federal funds.

Named in memory of Mary Hurley, the mother of Gen. Patrick Hurley, the hospital has 39 rooms, complete with surgical, x-ray, obstetrical and all other departments and divisions which go to make a complete hospital.

Plans were begun in the summer of 1947 and the money was raised by box suppers, cake walks, shows, steer auctions, etc., in addition to substantial contributions by churches, civic groups, individuals living in Coalgate, and former residents including a $5,250.00 contribution from Pat Hurley, whose mother is buried near Coalgate.

Members of the hospital's executive committee, who were also among the first leaders in the hospital drive, are: R. M. Lacy, Kenneth Sharp, Avard Hudson, Carl Whiteley, Carl Portman, Bill Gaddo and Mrs. Lillian Briggs. Melvin Watkins is administrator.

A.M.A. EDUCATION FOUNDATION ATTENDED BY OKLAHOMANS

L. Chester McHenry, M.D., President of the Oklahoma State Medical Association, and John F. Burton, M.D., represented the O. S. M. A. at a meeting in Chicago February 17 of the American Medical Association Education Foundation.

Purpose of the meeting was to explain to representatives of state medical associations the plans and program of the Foundation for 1952.

Announced at the meeting were the dates of April 15 through June 30 for the campaign for contributions.

Physicians who contribute to the Foundation can designate the school to which their contribution can be be made and such designated contributions will be over and above any other equal contribution of Foundation funds to the accredited medical schools.

ATTEND RURAL HEALTH CONFERENCE IN DENVER

The seventh annual Rural Health Conference was held in Denver February 28 and 29 and March 1. Representatives from the O. S. M. A. attending were C. M. Bielstein, M.D., chairman of the Committee on Public Health, and John K. Hart, associate executive secretary.

Also attending from Oklahoma were John Shackelford, M.D., of the State Health Department, and Ferdie Deering, editor of the Oklahoma Farmer-Stockman, and past president of the American Agricultural Editors Association. Mr. Deering appeared on the program Saturday, March 1, presenting a discussion on the manner in which the agricultural press of the nation could cooperate in promotion of rural health programs.

The conference, which was well attended, had representatives from medical and farm groups throughout the nation.

Featured speaker at the Saturday luncheon was Allen D. Cline, president of the American Farm Bureau, who presented a searching analysis of the present national economic situation.

OKLAHOMA STATE MEDICAL ASSOCIATION, Oklahoma City, Oklahoma. Municipal Auditorium, May 19-21, 1952.

AMERICAN COLLEGE OF PHYSICIANS, Cleveland, Ohio, April 21-25, 1952.

AMERICAN COLLEGE OF CHEST PHYSICIANS, Congress Hotel, Chicago, Ill., June 5 through 8, 1952.

SIXTH ANNUAL SYMPOSIUM ON FUNDAMENTAL CANCER RESEARCH, of the University of Texas M. D. Anderson Hospital for Cancer Research, Texas Medical Center, Houston, April 25 and 26. All meetings will be held at the Shamrock. Further information may be obtained from William O. Russell, M.D., 2310 Baldwin Street, Houston 6, Texas.

AMERICAN COLLEGE OF ALLERGISTS, eighth annual meeting will be held at the William Penn Hotel, Pittsburgh, Pa., April 7, 8, 9, 1952. For more information write the College, LaSalle Medical Building, Minneapolis 2, Minnesota. A graduate instructional course in allergy will be held in Pittsburgh April 4, 5, and 6.

KANSAS CITY SOUTHWEST CLINICAL SOCIETY offers merit awards to all physicians serving a residency and /or internship in medicine in approved hospitals. Papers submitted must be original work compiled during his service. Contest also is open to physicians graduaitng not longer ago than 1945. Awards are: first, $300.00; second, $200.00; and third, $100.00. Application for participation must be made in writing to the Executive office, 630 Shukert Buildiug, Kansas City 6, Mo., on or before May 15, 1952.

REVIEW OF GENERAL MEDICINE

O.S.M.A. members are reminded of the remaining postgraduate courses, "A Review of General Medicine," to be held throughout the state during April and May. Courses began in 16 centers March 13.

Sponsored by the Association's Educational Committee, in cooperation with the University of Oklahoma School of Medicine, the regional courses are offered through a series of three evening sessions.

The remaining schedule is as follows:

ALTUS-GUYMON-OKLAHOMA CITY-TULSA-WOODWARD

April 3—Emergency Orthopedic Measures (presented at Guymon for Guymon-Woodward center) Management of Obstetrical Problems

April 24—Medicine aud Therapeutics (presented at Woodward for Guymon-Woodward center) Diagnosis and Treatment of Common Skin Diseases

ARDMORE-DUNCAN-DURANT-McALESTER-MUSKOGEE-SHAWNEE

April 10—Emergency Orthopedic Measures Management of Obstetrical Problems

May 8 —Medicine and Therapeutics Diagnosis and Treatment of Common Skin Disorders

BARTLESVILLE-ENID-MIAMI-OKMULGEE-STILLWATER

April 17—Emergency Orthopedic Measures Management of Obstetrical Problems

May 15 —Medicine and Therapeutics Diagnosis and Treatment of Common Skin Disorders

Are You Familiar With the Background and Training of Medical Technologists

Registered with the American Society of Clinical Pathology?

In 1928 the American Society of Clinical Pathologists established a Registry to set up and pass upon the qualifications of laboratory technicians. Approved schools for training these workers were promoted. The registry immediately received the recognition of the American Medical Association, the American College of Surgeons, the American Hospital Association, the Catholic Hospital Association and other well-known organizations interested in the better care of patients and improving medical practice. The council on Medical Education and Hospitals of the American Medical Association was authorized to formulate standards and approve those schools which meet the necessary requirements. After passing a satisfactory examination given by a special committee of the American Society of Clinical Pathlogists, applicants were designated as Medical Technologists. (M.T.) This title implies a degree of competence provided for by the Registry, and recognized in nationally known medical and hospital spheres.

The qualified Technologists of the registry who meet ethical standards of achievement and conduct are admitted to membership in the American Society of Medical Technologists, organized in Chicago on June 13, 1933. The membership now has more than 4,600 A.S.C.P. registered Medical Technologists.

The membership in the American Society of Medical Technologists is limited to:

1. Those who hold a certificate from, and are in good standing with the Board of Registry of Medical Technologists of the American Society of Clinical Pathologists, or

2. Those who possess a degree at least at a Master's level from an accredited college in any of the six major fields of Medical Technology and have one year's experience in a clinical laboratory approved by any member of the American Society of Clinical Pathologists.

The purposes of the Society are as follows:

1. To promote higher standards in clinical laboratory technique.
2. To elevate the status of those specializing in medical laboratory technique.
3. To create mutual understanding and cooperation between the medical technologist and the physician, and all others who are employed in the interest of individual and public health.
4. To issue charters to subordinate societies or chapters of this society.
5. To promote the mutual aid and benefit of its members.

This organization, based upon the background of training required, has assured the medical profession the highest possible competence in the performance of all types of medical laboratory work. The pathologists are doubly appreciative of this and have always given council and active support to all activities of the A.S.C.P. registry and the American Society of Medical Technologists. The cotinuance of the present high standards and their further improvement should be assisted and fostered by all members of the medical profession in our common interest of improving the care of the sick patient.

Reprinted from
Texas State Journal of Medicine—April, 1951.

Therapy for Vascular Headache to Reverse the Physiologic Disturbance

Headache, a problem encountered in all kinds of medical practice, may occur in association with any of a variety of disorders, some organic, other purely functional.

Among the several types, functional headaches present the greatest problem because of their obscure etiology and recurrent nature.

Among these are:

Migraine (both classical and variant forms)
Tension headache
Psychogenic headache
Histaminic cephalgia

Wolff and his co-workers established that the pain of these headches is due to disturbance of the tonus of cranial blood vessels — hence the term *vascular headaches.*

The craniovascular changes associated with the several phases of the typical migraine attack are:

Vasoconstriction — to which the visual prodromata are attributable. It is possible to abort the attack during this phase in all but a few cases. (See treatment below.)

Vasodilatation — as the vessels lose their tone, exaggerated pulsations set in, resulting in the throbbing pain which characterizes vascular headache. Treatment for the attack is still effective during this phase. (See below.)

Vessel Edema — if the vasodilation continues for too long, vessel walls become edematous; this changes the character of the pain to a steady, intense aching. The attack can now no longer be checked, even with maximum dosage of specific drugs. *Moreover, sustained headache often induces reflex neck muscle tension, a source of residual pain.*

Therapy: 1. Reduce the frequency of attacks — psychotherapy and regulation of living habits to avoid fatigue and nervous tension.

2. Relieve the acute attack — of the numerous drugs which have been tried, ergotamine and its derivative preparations have proved most effective. The newest product is oral tablets of Cafergot®, N. N. R. (ergotamine with caffeine 'Sandoz'). When dosage is adjusted to the needs of the individual, Cafergot will give good relief in 85% of cases. It enables a greater number of patients to benefit from early administration since the oral route simplifies treatment as compared to parenteral therapy.

The dosage procedure is:

1. Take 2 tablets at first sign of the attack.
2. If attack continues, take one additional tablet every ½ hour until attack is terminated *(max. 6 tabs. per attack).*

Many migraine patients delay taking medication until the attack is at its height. Explicit dosage instructions may be forgotten unless the patient comes to realize their importance. Therefore, to encourage adherence to correct procedure, we have prepared pads outlining detailed dosage instructions. Supplies of these INSTRUCTION SLIPS will gladly be sent upon request.

GENERAL REFERENCES: DeJong, R.: Chicago M. Soc. Bull *54:* 106, 1951. Friedman, A.: Modern Headache Therapy, St. Louis, C. V. Mosby Co., 1951. Wolff, H.: Headache and Other Head Pain, N. Y., Oxford Univ. Press, 1948.

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BOOK REVIEWS

THE SPECIALTIES IN GENERAL PRACTICE. Russell L. Cecil, M.D., Editor. W. B. Saunders Company, Philadelphia, 1951. 818 pages.

A good general practitioner should, in his general capacity as family physician and medical advisor, be able to treat the majority of the cases he sees. However, a good general practitioner should also realize his limitations, and recognize the need for consultation with qualified specialists when the medical situation exceeds the capacities of his own training or experience.

This book should be of great value to all physicians in general practice. Many treatments which might ordinarily be referred to specialists are so clearly explained that they may be quickly adopted by the general man. Probably even more important is the possibility of this book helping one to make a sensible tentative diagnosis so that some of the more difficult and puzzling cases may be referred, without delay, to the proper specialist.

The first three chapters deal with minor surgery and orthopedic surgery. Diagnosis and treatment which should fall within the realm of the general practitioner are discussed. Also, cases which should be sent to experts are listed. The general practitioner is also told how to handle cases after they are referred back from the orthopedist.

In the chapter on urology there are many useful hints in diagnosis and treatment.

A very important chapter is the one on diseases of the anus, rectum and colon. The general practitioner is shown the importance of routine proctological examinations in any diseased condition of the lower intestinal tract. Common ailments like constipation are discussed in detail. Many surgical techniques are shown clearly, so that one should be able to adopt them easily.

In the chapter on pediatrics, feeding of infants is thoroughly discussed, as well as the more serious disorders such as epidemic diarrhea and caeliac syndrome.

Chapters covering the eye, ear, nose and throat specialties, dermatology and syphilology, and psychiatry discuss competently and in easily understandable language these important fields of practice.

The field of internal medicine is very obviously omitted, for the good reason that Doctor Cecil has another excellent volume covering this phase of practice.

It is this reviewer's opinion that this book should be on the desk, not on the shelf, of every physician engaged in general practice.—Warren B. Poole, M.D.

HIPPOCRATES ON INTERCOURSE AND PREGNANCY. An English translation of On Semen and On the Development of the Child by Tage U. H. Ellinger, S.C.D., M.A. with an introduction by Alan F. Guttmacher, M.D. Henry Schuman, Inc., New York. 1952. Price $2.50.

Though humanity stands abashed by scientific progress, including the untouchable atomic energy, it is comforting to reflect that human nature has not changed. Arising out of the confusion, the hustle and bustle of the world's mechanical marathon this scholarly translation of Hippocratic thinking about some of the fundamental facts of life is refreshing.

Whether these remarkable books "On Semen," "On Intercourse and Pregnancy," and "On the Development of the Child" are truly Hippocratic or from the opposing Cnidian school, they reveal the fact that added knowledge leaves human nature unaltered. This attrac-

tive little volume bringing under the stamp of Henry Schuman an intimate look at Greek life in the Fifth Century B.C., is well worth the reading.

The pocket format, easy type and attractive design would delight Hippocrates and his contemporaries, if it were to appear in their book shelves, no matter where they are today.—Lewis J. Moorman, M.D.

AN ATLAS OF NORMAL RADIOGRAPHIC ANATOMY. Isadore Meschan, M.D., W. B. Saunders Company, Philadelphia-London, 1951, 569 pages, 1,044 illnstrations on 362 fignres.

In this book the author has snccessfully accomplished his fonrfold objective in furnishing a workable atlas to bring into being: 1. an nnderstanding of basic anatomy as applicable to radiography; 2. positioning of the patient for proper filming; 3. a concept of the film so obtained; 4. a reliable ready reference book for the technician as well as the physician.

The contents are divided into chapters commencing with fundamental concepts for radiographic anatomy, then considering chapter by chapter the varions anatomical systems and finally a very nseful index for the subject matter presented. The most outstanding contribution in my opinion is the plan of presenting a line drawing of each radiograph in detail on the same page or on the page opposite to the reprodnction with captions naming the important anatomical parts. On most every pair of facing pages will be found a drawing to show the proper positioning for a study, the radiograph thereby obtained, a line drawing of the anatomy seen and points of practical interest.

The only criticism unfavorable to the book, which will rightfnlly find its way into many practitioners' offices and hospitals, relates to the omission of a chapter on protection from irradiation in reference to the patient and the radiographer. It is hoped that future editions of this valnable book will contain such a chapter outlining simple rnles and protective measures to be followed at any radiographic installation.—Bert E. Mulvey, M.D.

THE ROCKEFELLER FOUNDATION DIRECTORY OF FELLOWSHIP AWARDS, for the years 1917-1950, Rockefeller Foundation, New York, 286 pages.

The main body of this Directory consists of two sections. The first is a straight alphabetical listing of 5,026 individuals who have held fellowships directly granted by the Fonndation. Each entry contains biographical information which incldes the present position of the fellow and his latest address. The second section is a geographical listing according to the conntry of his latest residence and indicating the field of interest. Information is given on a total of 6,342 fellowship awards.

In the introduction, Mr. Chester I. Barnard, president of the Foundation, mentions that approximately 19 million dollars have been expended for fellowships awarded and administered by the Foundation. More than one-half of the fellowships have been awarded by either the International Health Division or the Medical Sciences Division. It has been the policy to select indivdnals sponsored by their own institntions who wish to take advanced stndy in foreign centers.

A brief pernsal of the present employment of the past fellows would snrely give the reader the impression that the Fonndation has wisely selected candidates to accomplish its pnrpse of training leaders in the fields of research, teaching and public service. The reader wonld donbtless conclude that this expensive bnt highly snccessfnl program should be continued.—R. P. Howard, M.D.

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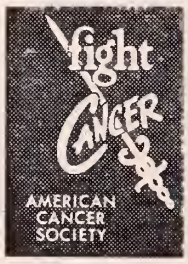
It provides a permanent case-history record. A memo will bring you a sample...or as many as you want for your daily practice... without obligation.

Many doctors are prescribing "Daricraft Homogenized Evaporated Milk". It is always uniform, safe, sterilized, easy to digest, and high in food value and minerals. Daricraft contains 400 U. S. P. units of Vitamin D per pint.



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OKLAHOMA DIVISION OF THE AMERICAN CANCER SOCIETY REPORTS



The February issue of the *Journal of the American Medical Association* (page 398) carried reviews of two new professional films sponsored by the American Cancer Society and the National Cancer Institute. These were:

UTERINE CANCER: THE PROBLEM OF EARLY DIAGNOSIS: 16 mm., color, sound, showing time 21 minutes.

THE EXFOLIATIVE CYTOLOGIC METHOD IN THE DIAGNOSIS OF GASTRIC CANCER: 16 mm., color, sound, showing time 22 minutes. Prepared by Cornell University College and New York Hospital under the supervision of George N. Papanicolaou, M.D., and William A. Cooper, M.D.

The Oklahoma Division of the American Cancer Society has prints of both films available and will be glad to ship them prepaid to any medical society or group interested in viewing them. In addition to these new films, the Oklahoma Division has available prints of four other films produced earlier. These are also available to any professional meeting.

CANCER: THE PROBLEM OF EARLY DIAGNOSIS

BREAST CANCER: THE PROBLEM OF EARLY DIAGNOSIS

WHAT IS CANCER? (Film for nurses)

GASTROINTESTINAL CANCER: THE PROBLEM OF EARLY DIAGNOSIS

NARCOTIC LAW, CORONER SYSTEM, PRESCRIPTIONS DISCUSSED AT PUBLIC POLICY MEETING

Members of the Public Policy Committee of the Association met Sunday, March 2 in the Executive Office. The Committee considered the bills which have been prepared by the State Legislative Council for submission to the 1953 session of the Oklahoma Legislature with regard to amending the present state statutes governing the use of narcotics.

The committee likewise re-endorsed its support of the proposed Medical Examiner's Bill which would take the place of the present coroner system.

The contemplated changes with regard to the writing of prescriptions and their refilling that will become effective on April 26 due to the amendments to the Federal Food and Drug Act were discussed and the committee approved the proposal that joint meetings be held in all counties, where such meetings would be deemed practical, with the local pharmacists.

Public Policy Committee members attending the meeting were John E. McDonald, M.D., Tulsa, chairman; and Wayne E. Starkey, M.D., Altus; E. E. Talley, M.D., Enid; Louis H. Ritzhaupt, M.D., Guthrie; C. A. Hicks, M.D., Holdenville; John W. Records, M.D., Oklahoma City; E. H. Shuller, M.D., McAlester; and the President of the Association, L. Chester McHenry, M.D., Oklahoma City.

At the Annual Meeting of the Board of Directors of the Oklahoma Division, Gregory E. Stanbro, M.D., was reelected Chairman of the Board; M. L. Wardell, Ph.D., David Ross Boyd, Professor of History at the University of Oklahoma was reelected President; and W. Howard Patten of Norman, Treasurer. Joseph W. Kelso, M.D., is chairman of the Executive Committee, and William E. Eastland, M.D., is Chairman of the Committee on Professional Service to Cancer Patients.





Pictured seated at the head table at the annual dinner of the Oklahoma Division of the American Cancer Society, held recently in Oklahoma City, are left to right: Grady F. Mathews, M.D., State Commissioner of Public Health and Member of Board of Directors; William E. Eastland, M.D., Chairman of Committee on Professional Service to Cancer Patients; Mrs. William E. Eastland; Mrs. Gregory E. Stanbro; Gregory E. Stanbro, M.D., Chairman of the Board; Mrs. Joseph W. Kelso; Mefford R. Runyon, Executive Vice President of the American Cancer Society; Joseph W. Kelso, M.D., Chairman of the Executive Committee, who presided at the dinner; Mrs. Edith B. Ritchie, Field Representative of the American Cancer Society; M. L. Wardell, Ph.D., President; Mrs. M. L. Wardell; Charles P. Bondurant, M.D., member of the Board of Directors; Mrs. Charles P. Bondurant; Mrs. E. Lee Ozbirn, State Commander, and member of the Board of Directors of the American Cancer Society; Mrs. Oscar L. Fontaine; Rev. Oscar L. Fontaine, Greer County Campaign Chairman.

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...on oral estrogen therapy that imparts ***no odor, no taste, no aftertaste***

Convince her that the climacteric is not the be-all and end-all of her life and you solve, perhaps, her most serious problem. Then, prescribe SULESTREX. As effective estrogen therapy as science has yet created, SULESTREX will conveniently, esthetically and rapidly end the physical symptoms. Odorless and tasteless in small compressed tablets, SULESTREX will never cloud her breath or perspiration.

Following a study of 58 standardized menopausal patients, in which all attained complete symptomatic relief, Perloff[1] termed SULESTREX a "potent and effective oral estrogen with an extremely low incidence of nausea." Another recent report on a controlled study by Reich and associates[2] states that "all patients noted a marked sense of well-being, and commented on their ability to resume normal activity with amazing vigor."

Now available in three potencies for your prescribing convenience—0.75-, 1.5- and 3-mg. grooved tablets—SULESTREX is stocked by pharmacies everywhere. Try this esthetic therapy soon or write for complete information. Abbott Laboratories, North Chicago, Illinois. Abbott

1. Perloff, Wm. H., (1951) Treatment of the Menopause. II. Amer. J. Obst. & Gynec., 61:670, March. 2. Reich, W. J., et al. (1951), A Recent Advance in Estrogenic Therapy. I. American J. Obst. & Gynec., 62:427, August.

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MEDICAL SCHOOL NOTES

Message from DR. MARK R. EVERETT, *Dean, The University of Oklahoma School of Medicine*

MEDICAL SCHOOL ESSENTIALS

Because many physicians are interested in the requirements for an accredited medical school, I have prepared a brief review of the revised "Essentials of an Acceptable Medical School," as published by the American Medical Association in December, 1951. It has been necessary to omit many details of the official publication as it appears in reprint form.

A basic principle of the requirements is stated as follows: "The number of students to whom an adequate medical education can be given by a college is related approximately to the laboratory and hospital facilities available and to the size and qualifications of the teaching staff." These facilities and the trained personnel are necessarily costly. Since clinical facilities are an absolute necessity, sound financing of university hospitals is as important as providing an adequate annual budget for the medical school proper. This fact makes schools of medicine unique as compared with other institutions of higher education from the budgetary standpoint. Care of the indigent ill is an integral part of most university hospitals, and therefore cannot be divorced from considerations regarding proper financial support of medical schools.

Abstracted below are the major points included in each of the sections listed by the A.M.A. in its outline on "Essentials of an Acceptable Medical School." These essentials have been carefully worked out by the Council on Medical Education and Hospitals and provided adequate safeguards to the maintenance of the present level of the medical profession. In general, The University of Oklahoma School of Medicine fulfills these essentials to a high extent, although there are many areas where improvements can be made.

ORGANIZATION—Medical schools should be incorporated, nonprofit institutions, with a board of trustees composed of public spirited men or women having no financial interest in the operation of the school or associated hospitals.

ADMINISTRATION—There should be careful supervision of the entire school by a dean, or other executive officer, fitted by experience for this responsibility. He should possess sufficient authority to direct the operations of the institution successfully. The school should maintain a good system of records on its students, should issue a bulletin at regular intervals outlining requirements for entrance, the courses given by each department, and the qualifications of its faculty. Admission of students must be in the hands of a responsible committee or examiners, whose records shall always be open for inspection.

FACULTY—There should be a competent teaching staff. Nominations for appointment should originate in the faculty under the leadership of the dean. Appointments should be based on thorough training and demonstrated interest and ability to teach. It is usually desirable, too, that faculty members have interest and ability in research.

For the basic sciences it is desirable to have an adequate number of full-time faculty members who are able to devote their entire time to teaching and research in order to keep abreast of the rapid progress of medical science. A sound instructional program requires the services of four to five full-time teachers for each 100 students in a course, depending upon the subject. Salaries for the full-time faculty should be adequate for reasonable support without the necessity of diverting time and energy to other occupations.

In the major clinical areas of medicine, surgery, pediatrics, obstetrics, and psychiatry there should be a nucleus of full-time instructors having responsibility for planning the department's educational program which is conducted to a considerable extent by a clinical faculty consisting in most schools of part-time, volunteer teachers.

PLANT—The school should own, or have use of, modern fireproof buildings sufficiently large to provide lecture rooms, class laboratories, small laboratories for staff members, administrative offices, and a medical library. Equipment should be adequate for student use as well as for research.

LIBRARY—There should be a well developed medical library readily available to students and faculty. The library should include the more modern reference books, commonly used indexes, and should receive regularly the leading medical periodicals.

TEACHING MATERIALS AND SPECIMENS—There should be a supply of dissecting material sufficient to allow each two students to dissect at least a lateral half of a human cadaver. For laboratory use and for research there should be a supply of animals properly housed and cared for. Collections of anatomic, embryologic and pathologic specimens should be developed, displayed, and indexed.

CLINICAL FACILITIES—The school should own or control a general hospital in which the attending staff is appointed by the school. Arrangements can be made with independent hospitals to supplement the facilities for undergraduate teaching provided instruction in these hospitals is conducted by faculty members. Enough patients should be available to each student to permit him to study the common surgical and medical cases, plus a representative number of patients in each of the specialties. Bedside instruction should be developed for small groups of students and cases assigned each individual student under a well supervised clinical clerk system. The student should observe and record progress of his patients under strict supervision of a faculty member with assistance from the resident staff. The number of hospital beds necessary for the program is that which provides for each student on a hospital clerkship three to five news cases of teaching value per week for thorough study. Outpatient facilities should be available and under the control of the school to provide students serving outpatient clerkships with two new cases daily.

RESOURCES—A school of medicine cannot develop an adequate program if it relies solely on income from student fees. It is therefore essential that a school have a substantial income in addition to these fees.

REQUIREMENTS FOR ADMISSION—Premedical courses should provide the opportunity for general education plus theoretical and laboratory courses in physics, biology and chemistry. A minimum of three years training in an approved college is required for admission to medical school, although it is recommended that most students complete four years. The quality of work performed in premedical courses must be evaluated for admission, as well as the character, motivation and health of the applying student. (NOTE. Governing boards of medical schools frequently set additional requirements for admission concerning state residency, etc.)



"These Are Essentials"

CURRICULUM—The entire course should be designed as an integrated program of instruction with the objective of providing a sound foundation in the fundamentals of medicine upon which the student can build in the future in general or specific practice, or in scientific investigation and teaching. The student should mature sufficiently through his medical course to be able to assume the responsibilities of his profession, and should have acquired such habits of mind and thought that he will continue to educate himself throughout his life.

It is necessary for a school to continually evaluate its teaching program and to introduce modifications and new methods and materials. The curriculum should extend over a four year period and include instruction in approximately 20 different branches of the basic and clinical medical sciences. In the clinical years there is no substitute for the "case method" of instruction, and the student should be made to develop a feeling of real responsibility to patients.

ADMISSION TO THE APPROVED LIST—A medical school desiring approval must provide the Council on Medical Education and Hospitals of the A.M.A. with basic information about the school. The Council will then survey the school to determine whether it complies with the standards set forth in these essentials. Approval of a school is granted by the Council subject to annual review. Approval may be withdrawn at any time that a medical school ceases to comply with one or more of the requirements set forth in these essntials.

POSTGRADUATE COURSES

A two-day postgraduate course in INTERNAL MEDICINE AND CARDIOVASCULAR DISEASES will be held at St. John's Hospital, Tulsa, Oklahoma, April 10 and 11, 1952. This course will be sponsored by the Office of Postgraduate Instruction, University of Oklahoma School of Medicine, the Tulsa Heart Association and the Tulsa Internists Association. Tuition will be $10.00.

A two-day course in X-RAY DIAGNOSIS will be held at the School of Medicine, Friday and Saturday, May 2 and 3, 1952. This will be a review of problems in x-ray interpretation, during which many interesting and problem x-ray films will be presented and discussed. There will be both lectures and discussions of clinical material. Tuition is $10.00.

OBITUARY

J. H. PLUNKETT, M.D.
1874-1952

J. H. Plunkett, M.D., well known eastern Oklahoma physician, died in his office in Wagoner Feb. 4, 1952.

Doctor Plunkett, who had been out late the night before on a maternity call, complained of being tired after making another call the following day and lay down to rest. He died while his nurse was summoning another physician.

Doctor Plunkett was born April 12, 1874 in Logan county, Arkansas. He graduated from the Vanderbilt University School of Medicine in 1912 and began the practice of medicine at Porum where he remained until 1922 when he moved to Wagoner.

He was active in the Methodist church and all civic affairs of the community. Doctor Plunkett was a member of the Masonic Lodge, Lions club and Chamber of Commerce.

Survivors include the widow of the home, two sons, a daughter, a sister, five brothers and three grandchildren. Three children died in infancy.

CURRENT ACTIVITIES AT THE OKLAHOMA MEDICAL RESEARCH FOUNDATION

EDWARD C. REIFENSTEIN, JR., M.D.
DIRECTOR



This is the sixth in a series of monthly articles concerning the activities of the Oklahoma Medical Research Foundation. In this article will be discussed the activities in the field of clinical research in cancer, now under way at the Oklahoma Medical Research Institute and Hospital. This program is under the direction of Dr. Leonard P. Eliel, Head of the Section on Clinical Oncology.

In addition to the funds that have been supplied by the Oklahoma Medical Research Foundation, grants which have been made by several other organizations are being utilized in this program. These include a grant-in-aid from the National Cancer Institute, an institutional grant from the national organization of the American Cancer Society, grants from the Oklahoma chapter of the American Cancer Society, grants from the Damon Runyon Memorial Fund, and certain designated funds which have been established at the Foundation for the purpose of furthering research in the field of cancer.

The Section has undertaken a long-range program which is designed to clarify the mechanisms by which hormones, chemotherapeutic agents, and x-radiation markedly affect the growth of certain normal and neoplastic tissues in man. In this way it is hoped that a more rational therapeutic approach to cancer can be formulated, and that more can be learned about the nature of neoplastic processes and their effects on the organism as a whole. The problem will be attacked at two integrated levels: 1) a comprehensive study of the metabolic alterations induced in the cancer patient as a whole by various therapeutic agents, and 2) a study of the actual changes in tissue composition which occur in these patients.

Study of the patient as a whole will require hospitalization in the Research Hospital adjoining the Research Institute, where, under carefully controlled conditions, accurate measurements of the patient's intake and output can be made. The diet and excreta will be analyzed for nitrogen and electrolytes. On the basis of these results a balance ledger will be drawn up which will show the net changes in the body constituents measured. One will then be able to make certain tentative conclusions about growth or destruction of body tissues resulting from any given treatment. The conduct of such a metabolic study requires painstaking care and attention to details, but the amount of information obtained is tremendous. Plans for opening the Research Hospital wing at the earliest possible date are crystallizing.

The measurement of actual changes in tissue composition will be carried out on biopsy specimens obtained from patients on balance studies. The laboratory of the Clinical Oncology Section is busily engaged in developing methods for analyzing both common and rare tissue elements. These methods require that very small amounts of material be measured with a high degree of accuracy. The research assistants developing and testing these methods, Mrs. Bernice Katz Raskin and Miss Josephine Hawrylko, are highly qualified, by virtue of previous experience, to carry out this type of work.

Accurate measurements of changes in tumor growth rate will also be required. Except where tumors are easily visible and palpable, this may be a very difficult problem. One solution to the problem has already come out of previous research conducted by Doctor Eliel. Patients with lymphoid tumors were placed on constant diets of known composition and the intake and output of nitrogen, phosphorus, calcium, potassium, sodium and chloride were measured. It was found that these patients excreted excessive amounts of phosphorus in the urine when their tumors were made to shrink by the administration of pituitary adrenocorticotropic hormone (ACTH) or cortisone. Analysis of these patients' tumors revealed that they contained about three times as much phosphorus as did normal tissues. It was reasoned, therefore, that destruction of the tumors resulted in the excessive phosphorus excretion. Conversely, in patients with rapidly growing lymphoid tumors, the amount of phosphorus excreted in the urine was much less than would be expected, due to the large requirement of growing lymphoid tumors for phosphorus. Thus, it was possible on the basis of balance studies and tissue analyses to arrive at a mathematical formula expressing the rate of growth or destruction of a tumor. One of the goals of the Clinical Oncology Section is to make a survey of tumors, other than lymphoid types, in a search for other striking abnormalities in composition which would enable one in the same way to measure rates of growth or destruction. In order to broaden the scope of this search, the analyses are being extended to cellular constituents about which very little is known, such as magnesium, sulfur and calcium. It is also planned to analyze tumor and normal tissues for trace elements, using spectroscopic technics.

If an element were found in certain tumors in much greater concentration than in normal tissues, one would also be offered the opportunity of simultaneously using the radioactive isotope of this element as a means of specifically irradiating the tumor and as a measuring stick for the rate of tumor growth or destruction.

A more dynamic and perhaps more significant aspect of the problem will be a study of the actual changes in tissue composition which occur as a result of administering various agents. Doctor Eliel has already shown that both normal tissue and lymphoid tumors suffer profound falls in potassium content in patients who have received ACTH or cortisone. Marked falls in muscle phosphorus content have likewise been observed. The role which these changes in tissue composition have in the production of tumor shrinkage will be studied with a view to identifying the cellular processes or enzyme systems that have been changed as a result of the deficits. The analyses will be extended to the less common elements as well.

Valuable information on the metabolic effects of x-radiation and radioactive isotopes will come out of the studies in which these agents are used to treat tumors. Not only will the over-all metabolic changes be measured, but also the changes which occur in normal and cancer tissues. The widespread use of radioactive materials which can be anticipated in both military and industrial operations will make data of this nature extremely important, since very little is known at present.

Radioactive isotopes in tracer amounts will also be nsed in a good many of the studies to measnre the body content and rate of synthesis and destrnction of various constitnents, as affected by the agents used. For this pnrpose, the radioactivity laboratory in the Institute is admirably suited. It has facilities for preparing for injection the "hot" isotopes as they arrive from the reactor at Oak Ridge, Tennessee, and for counting the isotopic activity in various body tissnes and excretory products of patients who have received the isotopes. Two highly qualified men will participate in the radiation aspects of the investigations. Dr. Cleve Beller, Research Associate at the Institnte and Assistant Professor of Medicine at the University of Oklahoma School of Medicine, will act as Coordinator of Radiation Stndies and will snpervise the handling, administration, and measurements of radioactive isotopes. Radiation therapy will be snpervised by Dr. Peter E. Rnsso, Research Associate and Radiology Consultant at the Institute, and Associate Professor of Radiology at the University of Oklahoma School of Medicine.

In addition to the work described above, which is in the field of clinical investigation of the problem of cancer, animal and chemical studies in the field of cancer are also under way, directed by Dr. Charles D. Kochakian, of the Oklahoma Medical Research Institute. Doctor Kochakian is stndying the effect of agents which influence growth of tnmors in animals, and in particular he is investigating the effect of snch agents npon various enzyme systems. This work will be integrated closely with that of Doctor Eliel as the program evolves. In addition, certain agents which are being synthesized by Dr. Max N. Huffman, of the Oklahoma Medical Research Institute, will also be ntilized in the animal stndies of Doctor Kochakian and in the clinical studies of Doctor Eliel.

Thns, the problem of cancer, one of the greatest killers that faces medical science today, is being attacked on a broad front at the Oklahoma Medical Research Institute. The annnal drive for funds for the American Cancer Socity will take place in April. Money from this drive will be ntilized to support cancer research as well as other activities of the Society, and some of it will be ntilized at the Oklahoma Medical Research Foundation. The fact that an active program of cancer research is being condncted at the Oklahoma Medical Research Institnte and Hospital shonld serve as a stimulus to the citizens of Oklahoma to give generonsly to "Conquer Cancer."

STUDENT A. M. A.'S FIRST NATIONAL CONVENTION

by LAWRENCE MCHENRY

The first national convention of the House of Delegates of the Stndent American Medical Association convened at 9:30 the morning of the 27th of December, 1951, in the Boulevard Room of the Sheraton Hotel in Chicago. Thirty-eight medical schools sent delegates to the first convention. The Delegate from Oklahoma was John M. Moore, and the Alternate Delegate, Lawrence McHenry.

The first session opened with a keynote address by the Assistant Secretary of the A. M. A., Dr. Ernest B. Howard, who congratulated the Student A. M. A. on its rapid development. The order of bnsiness was roll call, appointment of committees, and the reports of the officers. Included in the officers' reports were the reports of the two sndent representatives to the Atlantic City and Los Angeles meetings of the American Medical Association. Their reports consisted of a brief resnme of the two meetings, and a note of thanks to the A. M. A. for its assistance in the birth of the Student A. M. A. After the varions reports, the President, Warren Mullen of Michigan, called for resolutions and memorials which were snbmitted and referred to the appropriate committees.

The delegates were the gnests of the Blue Shield Medical Care Plan at a lnncheon that afternoon. Frank E. Smith, the Director of B.S.M.C.R. told the gnests "Fast Facts Abont Blne Shield." Dr. Paul R. Hawley, Director of the American College of Surgeons, spoke on "The Doctor's Stake in Blue Shield." The afternoon session consisted of the various committee reports and adjonrnment to the joint meetings of the old and new committees. That evening Abbott Laboratories of North Chicago were the hosts of the delegates to a bnffet and dance.

The next morning the Convention reassembled to consider nnfinished business and adopt new resolntions. The principal resolutions adopted by the House of Delegates were:

1. That, following a statistical survey of internships, S.A.M.A. initiate activity with the American Hospital Association and the American Medical Association to improve and equalize the compensation received by interns.

2. That S.A.M.A. strive to reduce the cost to S.A.M.A. members of as many medical jonrnals as possible.

3. That S.A.M.A. establish a Committee of International Relations to stndy the possibilities of joining an international federation of medical student associations and further the exchange of medical students and the distribution of information of interest to medical stndents.

4. That the S.A.M.A. participate to the fullest extent in the Civil Defense medical plans and operations.

5. That S.A.M.A.'s standing committee on medical education study the major medical edncation topics during the coming year. The first topic will be the "Undergraduate Medical Curriculnm".

6. That S.A.M.A. express its sincere appreciation for the program of the American Medical Education Foundation.

After the adoption of resolutions, Dr. Philip Thorek, internationally known thoracic surgeon, gave an excellent, as well as entertaining, presentation on "The Acute Abdomen".

Following the noon lnncheon, Dr. Harold C. Lenth, Consnltant to the Federal Civil Defense Administration, spoke on "The Medical Student and Civil Defense". The final session of the National Convention was climaxed by the election of officers. The new president of the Student A. M. A. is David Buchanan of the University of Illinois.

Although the Stndent A. M. A. is still in its infancy, it is the opinion of the Delegates from Oklahoma that the first national convention was very snccessful and that there are great poentialities for further development of the new organization.

HAVE YOU HEARD?

A. R. Sugg, M.D., Ada, was principal speaker at the Pontotoc County Schoolmasters club's February meeting.

Muriel Hyroop, M.D., Fort Supply, spoke to the Elk City Kiwanis club recently.

W. F. Bohlman, M.D., Watonga, recently spent a month's vacation in Florida.

O. L. Parsons, M.D., Lawton, has been named to the executive board of the American Academy of Obstetrics and Gynecology.

Capt. Jack B. McGolrick, Clinton, has been made officer in charge of the medical aid station at the 25th division headquarters somewhere in Korea.

K. W. Navin, M.D., Shawnee, gave suggestions for health projects which might be carried on during the year when he addressed the county council of home demonstration clubs in Shawnee recently.

R. W. Lewis, M.D., Sulphur, recently held open house at his new clinic there.

H. E. Barnes, M.D., formerly of Oklahoma City, is now practicing in Choctaw.

R. Z. Taylor, M.D., Blair, and Mrs. Taylor recently visited in several southern states.

L. J. Starry, M.D., Oklahoma City, has been re-elected president and chief of staff of St. Anthony's hospital, Oklahoma City.

J. J. Smith, M.D., Shattuck, recently attended postgraduate courses at the Cook County Graduate School of Medicine, Chicago.

James F. Hohl recently returned to the states after serving two months at the 279th General Hospital at Osaka, Japan. He is now stationed at Camp Polk and his address is: James F. Hohl, Maj. M. C. 0-481298, U. S. Army Hospital, Camp Polk, Leesville, Louisiana.



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THE JOURNAL
of the
OKLAHOMA STATE MEDICAL ASSOCIATION

EDITORIALS

THE 59TH ANNUAL MEETING OF THE OKLAHOMA STATE MEDICAL ASSOCIATION

A glance at the tentative program suggests that this will be one of the best meetings the State Association has ever had and judging from all indications it will be the best attended.

The well chosen guest speakers coming from various sections of the country represent a wide range of medical and surgical interests and they can be counted upon for clearcut practical presentations. The local participants have been carefully selected and they are capable of presenting equally valuable material.

Of special interest is the well developed plan for television demonstrations on Medicine, Surgery and Pathology respectively presented at 9:00 to 10:00 A.M. Monday, Tuesday and Wednesday. Noteworthy is the fact that the pathology found at the operating table on Tuesday will be demonstrated on the Wednesday TV hour. All meetings, including the TV programs, will be in the Zebra Room, Municipal Auditorium. The round table luncheons will be at the YWCA, only two blocks from the auditorium.

Every physician in the State should take advantage of this opportunity for a three days' intensive postgraduate course in medicine and surgery without immediate cost to the individual. If a portion of the cost must be paid from the annual dues, then it is all the more important for each member to attend.

The physician who fails to support organized medicine through membership in the County, and State Associations will miss the abiding satisfaction of the full professional life; the physician who pays and fails to participate is equally wanting in professional rewards. Neither can he hope to have an easy conscience as long as he makes no constructive contribution to organized medicine and receives none of the benefits which should help him in the discharge of his obligations to the community and to those who place their health and their lives in his hands.

His eyes can never be anointed with the divine clay of medical science if he persistently avoids its sources. While it is difficult to find time to attend medical meetings, there has never been a period in the history of medicine when attendance was so important. The rapid progress in the science of medicine, particularly in the field of therapy, including surgery, makes refresher courses for the conscientious physician, imperative.

The members of the State Association who do not attend this carefully designed, well arranged meeting should have a mighty good excuse or prepare for an uneasy conscience.

THE HOUSE OF DELEGATES NEEDS YOUR SCRUTINIZING PRESENCE

On Sunday, May 18, the House of Delegates meets in the Hall of Mirrors, Municipal Auditorium at 1:00 P.M. A gallery is being provided for those who are not delegates. All members are urged to attend in order that they may be better informed with reference to problems, purposes, ideals and objectives of the State Association.

REMEMBER THE RULING

At the 1950 State Medical Association meeting the House voted to open our Annual Meetings to the colored physicians practicing in Oklahoma.

Because of circumstances over which the State Association had no control, it seemed inadvisable to invite them to attend the 1951 meeting.

This year the meetings are being held in the Auditorium and invitations are being sent to all colored physicians registered in the State. There are approximately 50 negro physicians in the State and good attendance is expected.

The officers of County Medical Societies were informed early in the year with the thought that they might wish to comment or to offer approval or disapproval. So far, only two have responded.

Since this plan has been two years in the making, there can be no reason for surprise. Members should put the dissemination of medical knowledge for the benefit of humanity far above the color line and accept the decision of the House of Delegates as evidence of medical progress.

LIBRARY OF THE
COLLEGE OF PHYSICIANS

President's Page

During this past year it has been a great privilege and a real pleasure to travel about as the President of the Oklahoma State Medical Association and attend numerous medical and nonmedical meetings. It has been inspiring to meet those doctors and business men and housewives and ministers and teachers who have organized meetings as testimonials to some of our senior physicians who have cared for the people of their communities a half century and more. It is difficult to understand how our nation can have traveled so far along the road toward socialized bankruptcy when there are so many sincere, God fearing, self respecting citizens making up our communities and towns and cities. These folk believe in working for a living. They are reverent. They are good neighbors. They take care of their own unfortunate neighbors. They educate their own children and some other people's children. They build their own hospitals when convinced of their need. Among these folk are many good doctors who have these same characteristics. These communities are the heart and soul of America.

I cannot write this last "Page" without expressing my deep gratitude and appreciation to those who have helped in solving the problems and carrying on the activities of the Association this past year. The Council has spent long hours away from home. The members of the various Committees have worked diligently. To Dick Graham and John Hart I wish to say that the affairs of the Association would fall to a very low ebb without their labors.

To all of you I can only say "Thank you!" for the honor and privilege of having served as your President.

Sincerely,

L. O. McHenry

President

OKLAHOMA STATE MEDICAL ASSOCIATION

Officers and Councilors



L. C. McHENRY, M.D.
Oklahoma City
President

59th Annual Meeting

Zebra Room

Municipal Auditorium

Oklahoma City, Oklahoma



LEWIS J. MOORMAN, M.D.
Oklahoma City
Secretary-Treasurer



A. R. SUGG, M.D.
Ada
President-Elect

May 19 - 20 - 21, 1952

House of Delegates, May 18, 1:00 P.M.
Hall of Mirrors, Municipal Auditoirum

Council Meeting, May 18, 10:00 A.M.
Room 207, Municipal Auditoirum

COUNCIL

1. F. S. Etter, M.D., Bartlesville (C) 1953
 J. E. Highland, M.D., Miami (V-C) 1953
 (Craig, Delaware, Mayes, Nowata, Ottawa, Rogers, Washington)
2. Clifford M. Bassett, M.D., Cnshing (C) 1954
 E. C. Mohler, M.D., Ponca City (V-C) 1954
 (Kay, Noble, Osage, Pawnee, Payne)
3. Bruce Hinson, M.D., Enid (C) 1952
 C. M. Hodgson, M.D., Kingfisher (V-C) 1952
 (Garfield, Grant, Kingfisher, Logan)
4. O. C. Newman, M.D., Shattuck (C) 1953
 L. R. Kirby, M.D., Cherokee (V-C) 1953
 (Alfalfa, Beaver, Cimarron, Ellis, Harper, Major, Texas, Woodward)
5. A. L. Johnson, M.D., El Reno (C) 1954
 Ross Depnty, M.D., Clinton (V-C) 1954
 (Beckham, Blaine, Canadian, Custer, Dewey, Roger Mills)
6. R. Q. Goodwin, M.D., Oklahoma City (C) 1952
 W. W. Rncks, Jr., M.D., Oklahoma City (V-C) 1952
 (Oklahoma)
7. Ned Burleson, M.D., Prague (C) 1953
 W. T. Mayfield, M.D., Norman (V-C) 1953
 (Cleveland, Creek, Lincoln, Okfuskee, Pottawatomie, Seminole)
8. John McDonald, M.D., Tulsa (C) 1954
 W. A. Showman, M.D., Tulsa (V-C) 1954
 (Tnlsa)
9. Shade Neely, M.D., Muskogee (C) 1952
 F. R. First, Jr., M.D., Checotah (V-C) 1952
 (Adair, Cherokee, McIntosh, Mnskogee, Okmulgee, Sequoyah, Wagoner)
10. E. H. Shuller, M.D., McAlester (C) 1953
 Paul Kernek, M.D., Holdenville (V-C) 1953
 (Haskell, Hughes, Latimer, LeFlore, Pittsbnrgh)
11. A. T. Baker, M.D., Durant (C) 1954
 T. E. Rhea, M.D., Idabel (V-C) 1954
 (Atoka, Bryan, Choctaw, Coal, McCurtain, Pushmataha)
12. J. H. Veazey, M.D., Ardmore (C) 1952
 W. T. Gill, M.D., Ada (V-C) 1952
 (Carter, Garvin, Johnston, Love, Marshall, McClain, Mnrray, Pontotoc)
13. H. M. McClure, M.D., Chickasha (C) 1953
 J. B. Miles, M.D., Anadarko (V-C) 1953
 (Caddo, Comanche, Cotton, Grady, Jefferson, Stephens)
14. L. G. Livingston, M.D., Cordell (C) 1954
 J. B. Hollis, M.D., Mangum (V-C) 1954
 (Greer, Harmon, Jackson, Kiowa, Tillman, Washita)

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Municipal Auditorium
Oklahoma City

CONVENTION HEADQUARTERS

The beautiful and Spacious Municipal Auditorium, Oklahoma City, will be headquarters for the 59th Annual Meeting of the Oklahoma State Medical Association.

MAY 19-20-21, 1952

All scientific sessions will be held in the Zebra Room. Complete program, biographies of guest speakers and general information follows on the succeeding pages.

Distinguished Guest Speakers

J. EDWARD BERK, M.D.
Philadelphia, Pennsylvania



Received B.A. degree from the University of Pennsylvania in 1932 and M.D. in 1936 from Jefferson Medical College. Assistant Professor of Medicine, Temple University School of Medicine, 1946; Research Associate, Fels Research Institute of Temple University School of Medicine, 1946; Associate Attending Physician, Jewish Hospital, 1939; and Gastroenterologst, Sidney Hillman Medical Center, 1951. Interned Walter Reed General Hospital, Washington, D.C., 1936-37. Received M.S. and D. Sc. for graduate work and research in internal medicine. Resident in medicine, Jewish Hospital, Philadelphia, 1938-39; full time clinical Assistant, Graduate Hospital of the University of Pennsylvania, 1939-40; Ross V. Patterson Fellow, Jefferson Medical College, 1940-41; Chief of the gastrointestinal section, Tilton General Hospital and Rhoads General Hospital September, 1941-December, 1945. Certified by the Board of Internal Medicine, 1943; and the sub-specialty Board of Gastroenterology, 1943. Member, American College of Physicians, American Gastroenterological Association, American Gastroscopic Society, American Federal for Clinical Research, College of Physicians of Philadelphia, American Association for the Advancement of Science, Sigma Xi, and Alpha Omega Alpha.

Sponsor—N. Sanford Matthews, M.D., Oklahoma City.

BRUCE CHOWN, M.D.
Winnipeg, Canada



Professor Pediatrics, University of Manitoba and Chief of Pediatrics, Children's Hospital. Received B.A. from McGill University, 1914; officer of artillery 1915-1919; M.D. University of Manitoba 1922; graduate work in pediatrics 1922-25 at Babies Hospital, New York, Nursery and Child's Hospital, New York, and Harriet Lane House, Johns Hopkins. On the staff of the Department of Pediatrics, University of Manitoba and Children's Hospital, Winnipeg, 1925 to date.

Sponsor—George H. Garrison, M.D., Oklahoma City.

HENRY HARLAN CRANK, M.D.
Houston, Texas



Certified by the American Boarl of Psychiatry and Neurology in Psychiatry, 1946. Graduated University of Texas, 1931; and received M.D., University of Texas Medical Branch, 1936. Associate Professor of Clinical Psychiatry, Baylor University School of Medicine, Houston; Consultant in Psychiatry, Veterans Administration Hospital, Houston; Consultant to Family Service Bureau, Houston; Consultant to Jewish Family Service Bureau, Houston; Courtesy staff, Hermann Hospital, Houston. Member American Psychiatric Association, American Psychoanalytic Association, Topeka Institute of Psychoanalysis (member and instructor), Houston Academy of Medicine, Houston Psychiatric Society, Theta Kappa Psi, county, state and A.M.A. Commander, United States Naval Reserve Medical Corps, 1942-1946. Medical surgical and psychiatric experience with native Okinawans during combat and garrison phases of Okinawa operations.

Sponsor—Charles E. Leonard, M.D., Oklahoma City.

Distinguished Guest Speakers

ORMOND S. CULP, M.D.
Rochester, Minnesota



Associate Professor of Urology, Mayo Foundation, University of Minnesota. Received A.B. 1931, Ohio Wesleyan University; M.D., 1935, Johns Hopkins University; interne, Johns Hopkins Hospital, 1935-36; Instructor in Pathology, McGill University, 1936-37; Resident Physician, St. Mary's Hospital, Pierre, South Dakota, 1937-38; Assistant Resident in Urology, Johns Hopkins Hospital 1938-40; Resident in Urology, Ancker Hospital, St. Paul, Minnesota, 1940-41; Johns Hopkins Hospital, 1941-42; Instructor in Urology, Johns Hopkins University, 1938-42; Associate Surgeon-in-Charge, Henry Ford Hospital, Detroit, Michigan, 1942-50 (excluding military service); Active duty U. S. Medical Corps, 1942-46; Urological Consultant, Veterans Administration, 1946-52; Consultant in Urology, Mayo Clinic since 1950. F.A.C.S.; Diplomate, American Board of Urology; member, North Central Section of the American Urological Association, American Urological Association, American Association of Genity-Urinary Surgeons, International Society of Urology, Central Surgical Association, Clinical Society of Genito-Urinary Surgeons, and Urologic Forum for Clinical Investigation.

Sponsor—Harry C. Ford, M.D., Miami.

LAURENCE SIDNEY FALLIS, M.D.
Detroit, Michigan



Received M.D. Queen's University, 1919; M.R.C.S., St. Bartholomew's Hospital Medical School, London, England, 1922; F.R.C.S. University of Edinburgh, Royal College of Surgeons, 1924; formerly Assistant Surgeon, Associate Surgeon, Surgeon-in-Charge and now Surgeon-in-Chief, Department of Surgery, Henry Ford Hospital, Detroit.

Sponsor—N. Price Eley, M.D., Oklahoma City.

WALTER A. FANSLER, M.D.
Minneapolis, Minnesota

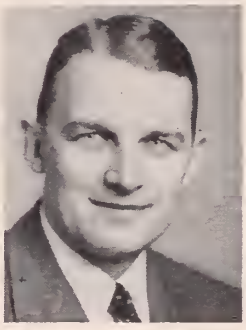


Received B.A. from University of Missouri in 1911; M.A. 1912 and received M.D. from Johns Hopkins University in 1914. Served as Instructor in Pathology at Marquette University 1914-1915; Clinical Professor of Surgery at the University of Minnesota for 34 years; Consulting Surgeon at the Minneapolis General Hospital and a member of the active staff of that hospital and of Abbott, Northwestern, Mt. Sinai and St. Mary's, Minneapolis. Consulting Proctologist at Glenn Lake Sanatorium, Minneapolis. F.A.C.S. and Fellow of the American Protologic Society; member of the American Board of Proctology, Minneapolis Academy of Medicine and Minnesota Academy of Medicine. Served as President of the American Proctologic Society and as Chairman for the Gastroenterology and Proctology Section of the American Medical Association.

Sponsors—John G. Matt, M.D., Tulsa, and Raymond L. Murdoch, M.D., Oklahoma City.

Distinguished Guest Speakers

JOHN R. HASERICK, M.D.
Cleveland, Ohio.



B.A. Macalester College, St. Paul, 1937; B.S. with distinction, University of Minnesota, 1938; M.D. University of Minnesota, 1941; M.S. in Dermatology and Syphilology, University of Minnesota, 1948; Certified by American Board of Dermatology and Syphilology, 1948; Member American Academy of Dermatology and Syphilogy; American Society for Investigative Dermatology; American College of Physicians, Committee on Dermatology of National Research Council Division of Medical Science. From 1947 to 1948 Instructor in Dermatology, University of Minnesota; Chief of Service, Department of Dermatology, U. S. Veterans Hospital, Minneapolis, Minnesota. Since 1948 member of staff, Department of Dermatology, Clevelend Clinic; Associate Professor of Dermatology, Frank E. Bunts Educational Institute, Cleveland Clinic Foundation.

Sponsor—William G. McCreight, M.D., Oklahoma City.

WALLACE E. HERRELL, M.D.
Rochester, Minnesota



Author of *Penicillin and Other Antibiotic Agents* (W. B. Saunders Company, 1945). Received M.D. University of Virginia 1933; M.S. in Medicine, University of Minnesota, 1937; Instructor in Biology, University of Virginia in 1928-29; Research Assistant in biochemistry 1929-30; Instructor in Anatomy, 1931-32. Interned at Virginia Mason Hospital, Seattle, 1933. Entered Mayo Foundation as a Fellow 1934. Now Associate Professor of Medicine, Mayo Foundation. Formerly first assistant in medicine, consultant in medicine, and instructor in medicine. Has served as head of a section on medicine of the Mayo Clinic since 1946. Member of the American College of Physicians, Southern Minnesota Medical Society. Alumni Association of the Mayo Foundation, Central Society for Clinical Research, American Federation for Clinical Research, American Society for Clinical Investigation, American Therapeutic Society, American Association for the Advancement of Science and Minnesota Society of Internal Medicine, Pi Chi, Alpha Omega Alpha, Sigma Xi and an honorary member of the Omaha Mid-West Clinical Society. In 1938 he was the winner of the first award for the Foundation Prize Essay of the American Association of Obstetricians, Gynecologists, and Abdominal Surgeons. Awarded the Rochester Distinguished Service Award of the U. S. Junior Chamber of Commerce, 1943.

Sponsor—Hugh A. Stout, M.D., Oklahoma City.

CHARLES L. MARTIN, M.D.
Dallas, Texas.



Professor of Radiology, Southwestern branch of the University of Texas Medical School in Dallas. Received E. E. University of Texas, 1941; M.D. Harvard Medical School 1919. Radiological Consultant to Baylor, Parkland, Gaston and Veterans Hospitals in Dallas; President-Elect of the American Roentgen Ray Society; Past President of the American Radium Society; Chairman, Board of Directors of the Dallas County Medical Society.

Sponsor—Peter E. Russo, M.D., Oklahoma City.

Distinguished Guest Speakers

J. M. ROBINSON, M.D.
Houston, Texas



Professor and Chairman of the Department of Otolaryngology of the University of Texas School of Medicine, Galveston; Otolaryngologist-in-Chief to the John Sealy and Allied Hospitals, Galveston; Associate Professor of Clinical Otolaryngology, Baylor University School of Medicine, Houston, F.A.C.S., member of the American Academy of Ophthalmology and Otolaryngology, American Laryngological, Rhinological and Otological Society; American Society of Ophthalmologic and Otolaryngologic Allergy. Chairman of the Department of Otolaryngology, St. Luke's Hospital, Consultant to the Hermann Hospital and the Houston Tuberculosis Hospital. Visiting staff of Memorial Hospital, St. Joseph's Hospital and Methodist Hospital.

Sponsor—Lee K. Emenhiser, M.D., Oklahoma City.

HOWARD ULFELDER, M.D.
Boston Massachusetts



Graduated Harvard, 1932; M.D., Harvard, 1936. Clinical Associate in Gynecology, Harvard Medical School; Assistant Surgeon at the Massachusetts General Hospital and Junior Physician in Gynecology, Pondville Hospital. F.A.C.S., member, Society of University Surgeons and several regional societies.

Sponsor—Joseph W. Kelso, M.D., Oklahoma City.

ANNUAL MEETING COMMITTEES

Arrangements Committee:
Henry H. Turner, M.D., Oklahoma City, *Chairman;* Allen G. Gibbs, M.D., Oklahoma City; John D. Ingle, M.D., Oklahoma City; and W. W. Sanger, M.D., Oklahoma City.

Roundtable Luncheon Chairman:
Dick Huff, M.D., Oklahoma City

Registration Chairmen:
John H. Lamb, M.D., and C. R. Rountreer, M.D., Oklahoma City

Entertainment Chairman:
Everett B. Neff, M.D., Oklahoma City

Housing Chairman:
Moorman P. Prosser, M.D., Oklahoma City

Golf Chairman:
James C. Amspacher, M.D., Oklahoma City

Scientific Work Committee:
C. M. O'Leary, M.D., Oklahoma City, *Chairman;* M. M. Appleton, M.D., Oklahoma City; Byron W. Aycock, M.D., Lawton; J. R. Colvert, M.D., Oklahoma City, *sub-chairman;* Byron J. Cordonnier, M.D., Enid; John G. Matt, M.D., Tulsa; John B. Morey, M.D., Ada; and John Records, M.D., Oklahoma City.

Commercial Exhibits Committee:
Vernon D. Cushing, M.D., Oklahoma City, *chairman;* Elmer Ridgeway, M.D., Oklahoma City; and Charles Hugh Wilson, M.D., Oklahoma City.

SUNDAY, MAY 18, 1952

BUSINESS SESSIONS

MUNICIPAL AUDITORIUM

10:00 A.M. Council Meeting
Room 207, Municipal Auditorium

12:00 Noon Registration of Delegates
Hall of Mirrors, Mezzanine, Municipal Auditorium

12:00 Noon Registration of those other than Delegates
Municipal Auditorium

1:00 P.M. House of Delegates
Hall of Mirrors, Municipal Auditorium

7:30 P.M. Second Session of the House of Delegates
Hall of Mirrors, Municipal Auditorium

UNIVERSITY OF OKLAHOMA SCHOOL OF MEDICINE ALUMNI ASSOCIATION

O. U. MEDICAL SCHOOL AUDITORIUM

Charles G. Stuard, M.D., President, Presiding

5:00 P.M. Welcome—Mark R. Everett, Ph.D., Dean

Honoring of Professor Emeritus:
John M. Alford, M.D., Medicine
by E. S. Lain, M.D.

Oklahoma Medical Research Foundation Report
Ted R. Warkentin, President, Lawton

Graduating seniors given the Hippocratic Oath Sponsio Academica
by Charles G. Stuart, M.D., Tulsa

Election of Officers

Open House—Oklahoma Medical Research Foundation—adjacent to Medical School

This program is for all doctors and wives attending the Oklahoma State Medical Association Annual Meeting and will last approximately one hour. Official 10 year class reunions will meet here also at this time for special meeting. Classes holding reunions and the chairmen are:

1942—Allen E. Greer, M. D., Oklahoma City (class of 1942 will meet at Beverly's Hide-A-Way at 7:00 P.M. for Social Hour and Dinner)

1932—V. M. Rutherford, M.D., Midwest City (dinner and entertainment has been planned for the class of 1932 at the Skirvin Hotel at 8:00 P. M.)

1922—N. Price Eley, M.D., Oklahoma City

1912—Pauline E. Barker, M.D., Guthrie

Monday, May 19, 1952

MORNING SESSION

ZEBRA ROOM, MUNICIPAL AUDITORIUM

J. B. MOREY, M.D., ADA, Chairman

9:00 - 10:00—**TELEVISION — General Medicine**

1. A. Myasthenia Gravis. Case Presentation with Therapeutic Test
 B. Glycogen Disease
 R. Q. Goodwin, M.D., Oklahoma City
2. Diagnosis and Treatment of Common Skin Diseases
 Onis G. Hazel, M.D., Oklahoma City
3. Chronic Liver Diseases
 Minard F. Jacobs, M.D., Oklahoma City

10:00 - 10:40 **GYNECOLOGY**

Carcinoma of the Cervix
Howard Ulfelder, M.D., Boston, Mass.

10:40 - 11:20 **RADIOLOGY**

Carcinoma of the Cervix
Charles L. Martin, M.D., Dallas, Texas

11:20 - 12:00 **UROLOGY**

Variations of the Cherney Incision for Improved Exposure of the Lower Abdomen and Urinary Tract
Ormond S. Culp, M.D., Rochester, Minnesota.

12:15 - 1:45 **ROUNDTABLE LUNCHEON**

P. K. Graening, M.D., Oklahoma City, Chairman

PAST PRESIDENTS' BREAKFAST

The Annual Past Presidents' Breakfast will be held Monday Morning, May 19, in the East Room, Mezzanine, Skirvin Hotel, at 8:00 A. M.

Monday, May 19, 1952

AFTERNOON SESSION

ZEBRA ROOM, MUNICIPAL AUDITORIUM

BYRON J. CORDONNIER, M.D., ENID, Chairman

2:00 - 2:40 GENERAL SURGERY

Billroth I. Gastrectomy
Laurence S. Fallis, M.D., Detroit, Michigan

2:45 - 3:05 ORTHOPEDICS

Emergency Care of Fracture Patients
Marvin B. Hays, M.D., Oklahoma City

3:05 - 3:25 SURGERY

The Use of Local Anesthesia with Alidase for Certain Major Surgical Procedures
Arthur L. Buell, M.D., Okmulgee

3:25 - 3:45 SURGERY

Fluids and Electrolytes in the Surgical Patient
William N. Aldredge, M.D., Bartlesville

3:45 - 4:00 GYNECOLOGY

Carcinoma of the Cervical Stump (Prophylaxis and a Plea for Early Diagnosis)
Gerald Rogers, M.D., Oklahoma City

4:00 PANEL DISCUSSION

Lower Abdominal Pain
Laurence S. Fallis, M.D., Detroit, Mich., Moderator
Howard Ulfelder, M.D., Boston, Mass.; James R. Colvert, M.D., Oklahoma City; Meredith M. Appleton, M.D., Oklahoma City; and Moorman P. Prosser, M.D., Oklahoma City, participants.

MONDAY NIGHT

The Arrangements Committee has planned no activity for Monday evening in the belief that those in attendance would prefer to have one evening open for their own individual planning.

Tuesday, May 20, 1952

MORNING SESSION

ZEBRA ROOM, MUNICIPAL AUDITORIUM

L. CHESTER McHENRY, M.D., OKLAHOMA CITY, Chairman

9:00 - 10:00 **TELEVISION—Surgery**

Appendectomy
Harrell C. Dodson, M.D., Oklahoma City

Thyroidectomy
Forrest M. Lingenfelter, M.D., Oklahoma City

Cholecystectomy
Leo J. Starry, M.D., Oklahoma City

10:00 - 10:40 **INTERNAL MEDICINE**

Current Trends in Antibiotic Therapy
Wallace E. Herrell, M.D., Rochester, Minnesota

10:40 - 11:20 **GASTROENTEROLOGY**

Management of Acute Pancreatitis
J. Edward Berk, M.D., Philadelphia, Pennsylvania

11:20 - 12:00 **PROCTOLOGY**

Operative Procedures for Carcinoma of the Rectum and Rectosigmoid
Walter A. Fansler, M.D., Minneapolis, Minnesota

12:15 - 1:45 **ROUNDTABLE LUNCHEON**

John H. Clymer, M.D., Oklahoma City, Chairman

AMERICAN DIABETES ASSOCIATION

All physicians interested in forming an Oklahoma Chapter of the American Diabetes Association are invited to attend a breakfast at the Biltmore Hotel, Room 207, at 8:00 A. M., Tuesday, May 20.

Tuesday, May 20, 1952

AFTERNOON SESSION

ZEBRA ROOM, MUNICIPAL AUDITORIUM

ALFRED R. SUGG, M.D., ADA, Chairman

2:00 - 2:40 DERMATOLOGY

Atypical Systemic Lupus Erythematosus

John R. Haserick, M.D., Cleveland, Ohio

2:40 - 3:20 RADIOLOGY

Carcinoma of Face, Neck and Mouth

Charles L. Martin, M.D., Dallas, Texas

3:20 - 3:40 GENERAL MEDICINE

Practical Considerations in the Physiology of Pain

Stuart Wolf, M.D., Oklahoma City, Oklahoma (by invitation)

3:40 - 4:00 GENERAL MEDICINE

Canicola Fever

Leon C. Freed, M.D., Perkins

4:00 PANEL DISCUSSION

Use and Abuse of Newer Antibiotics

Wallace E. Herrell, M.D., Rochester, Minnesota, Moderator

J. Edward Berk, M.D., Philadelphia; Walter A. Fansler, M.D., Minneapolis; and John R. Haserick, M.D., Cleveland, participants.

PRESIDENT'S ANNUAL DINNER DANCE

Featuring Henry King's Orchestra

Social Hour, 6:00 P. M.
Jade and Crystal Rooms
Skirvin Hotel

Dinner, 7:00 P. M.
Persian Room
Skirvin Tower

Wednesday, May 21, 1952

MORNING SESSION

ZEBRA ROOM, MUNICIPAL AUDITORIUM

CLINTON GALLAHER, M.D., SHAWNEE, Chairman

9:00 - 10:00 **TELEVISION—Pathology**

Pathologic Demonstrations of Surgical Specimens

James P. Dewar, M.D., Oklahoma City

10:00 - 10:40 **PSYCHIATRY**

The Psychological Preparation of Patients for Various Medical, Surgical and Psychiatric Procedures

H. Harland Crank, M.D., Houston, Texas

10:40 - 11:20 **OTOLARYNGOLOGY**

Otitis Media with Effusion

J. M. Robinson, M.D., Houston, Texas

11:20 - 12:00 **PEDIATRICS**

Clinical and Pathological Observations on Erythroblastosis

Bruce Chown, M.D., Winnipeg, Canada

12:15 - 1:45 **ROUNDTABLE LUNCHEON**

John G. Matt, M.D., Tulsa, Chairman

VISIT THE COMMERCIAL EXHIBITS

The Commercial Exhibitors are making a most important and worthwhile contribution to the success of our 59th Annual Meeting. The time you spend in visiting the Commercial Exhibits is time well spent. They can provide your with information in regard to the many products useful to you in your practice A complete list of Exhibitors can be found on page 183.

Wednesday, May 21, 1952

AFTERNOON SESSION

ZEBRA ROOM, MUNICIPAL AUDITORIUM

BYRON W. AYCOCK, M.D., LAWTON, Chairman

1:00 - 2:20 RADIOLOGY

Benign Greater Curvature Gastric Ulcers
David C. Lowry, M.D., and John R. Danstrom, M.D., Oklahoma City

2:20 - 2:40 PSYCHIATRY

Helping Your Patient Accept Psychiatric Referral
Harold J. Binder, M.D., Oklahoma City

2:40 - 3:00 PEDIATRICS

Rabies
Charles W. Freeman, M.D., Oklahoma City

3:00 - 3:20 PEDIATRICS

Some Current Thinking on Infantile Colic
Leonard L. Kishner, M.D., Tulsa

3:20 - 3:40 OBSTETRICS

A Method of Management for the Infertile Couple
W. Carl Lindstrom, M.D., Tulsa

3:40 - 4:00 UROLOGY

Recent Developments in Urology
Maxwell A. Johnson, M.D., Tulsa

4:00 OKLAHOMA MEDICAL RESEARCH FOUNDATION — RESEARCH ACTIVITIES

Introduction
Edward C. Reifenstein, Jr., M.D., Director

Steroidal Compounds in the Treatment of Rheumatoid Arthritis
Max Huffman, Ph.D.

Metabolic Effects of Steroid Hormones
Charles D. Kochakian, Ph.D.

Hypogonadism in the Male
R. Palmer Howard, M.D.

Hormones in the Treatment of Neoplastic Disease
Leonard P. Eliel, M.D.

Hemodynamic and Pneumodynamic Changes Following Therapy In Chronic Cardio Pulmonary Disease
Robert H. Furman, M.D.

Metabolic Bone Disease
Edward C. Reifenstein, Jr., M.D.

SCIENTIFIC EXHIBITS

Zebra Room, Municipal Auditorium

The following scientific exhibits will be on display in the Zebra Room of the Municipal Auditorium, Monday through Wednesday, May 19-20-21. Displays may be seen from 9:00 A.M. to 5:00 P.M.

1. GILBERT L. HYROOP, M.D.
Oklahoma City
Surgery of the Hand and Plastic and Reconstructive Surgery.
Exhibit will deal chiefly with hand surgery problems. Photographs and Roentgenograms of cases before and after hand surgery and some photographs of actual surgical procedures will be shown.

2. OKLAHOMA STATE DEPARTMENT OF HEALTH
Oklahoma City
Fluoridation of Public Water Supplies.

3. JAMES W. KELLEY, M.D.
Tulsa, Oklahoma
Correction of Congenital and Development Anomalies
Presentation of different types of congenital and developmental anomalies, pre-operative and post-operative photographs and brief legend as to method of correction.

4. MILFORD S. UNGERMAN, M.D. AND LEO LOWBEER, M.D.
Tulsa
Palliative Treatment of Tic Douloureux, Pathology of Tic Douloureux.
A statistical survey of the use of Small Pox Vaccine in the Palliative Treatment of Tic Douloureux in 125 unselected cases. Original research by Doctors Ungerman and Lowbeer. Also pathological sections showing the probable pathology of Tic Douloureux.

5. DEPARTMENT OF ANESTHESIOLOGY
University of Oklahoma School of Medicine
Oklahoma City
Techniques of Oxygen Therapy.
The physiological basis for Oxygen Therapy, its indications, the apparatus required for various techniques of administration, and the various advantages and disadvantages of each. We will attempt to demonstrate this by means of posters, photographs, and actual samples of the various types of equipment—masks, tents, and catheters.

6. ROBERT A. HAYNE, M.D. AND AVERILL STOWELL, M.D.
Tulsa
X-Ray Diagnosis of Brain Atrophy.
Forty x-rays and 60 lantern slides are shown demonstrating the types of cerebral atrophy, cerebellar and cortical atrophy with standard measurements.

7. DEPARTMENT OF PHYSICAL MEDICINE AND REHABILITION, V.A. HOSPITAL AND VETERANS ADMINISTRATION REGIONAL OFFICE
Oklahoma City
Demonstration will consist of prosthetic appliances on amputee patients. This includes above-the-knee and below-the-knee demonstrations; demonstrations of bilateral leg amputation stumps with the different types of artificial appliances; and arm amputees with several types of prostheses. Exhibit will consist of photographs, drawings and prosthetic appliances.

8. OKLAHOMA DIVISION, AMERICAN CANCER SOCIETY
Oklahoma City
Cancer Film Facts.
Posters will be shown depicting films available for professional and lay audiences.

9. HENRY H. TURNER, M.D., F. M. LINGENFELTER, M.D. AND ROBERT B. HOWARD, M.D.
Oklahoma City
Radioactive Iodine in the Diagnosis and Treatment of Thyroid Disorders.
Demonstration of equipment and techuique. Presentation of charts and graphs showing effects of 1131 on various thyroid disorders.

10. ROBERT L. ANDERSON, M.D.
Tulsa
Surgical Treatment of Congenital Heart Disease.
Ten minute movie of the surgical procedure, explanatory charts, etc.

11. OKLAHOMA ASSOCIACION OF PATHOLOGISTS AND OKLAHOMA SOCIETY OF MEDICAL TECHNOLOGISTS
Medical Technology.
This exhibit pertains primarily to the background of medical technology, including pamphlets, etc. on educational requirements and training. It will contain information on the purposes and aims of medical technologists in organized efforts to maintain the standards approved by the Council on Medical Education and Hospitals of the American Medical Association. The purpose of the exhibit is to supply specific and correct information to members of the medical profession not directly associated with clinical laboratory work as pathologists.

12. OKLAHOMA STATE DEPARTMENT OF MENTAL HEALTH
Oklahoma City
Mental Health.
Exhibit will reflect some work done in the State Hospitals in the department of mental health.

13. OKLAHOMA STATE HEART ASSOCIATION PROFESSIONAL EDUCATION COMMITTEE
Oklahoma City
Cardiovascular Diseases
Display of literature available to physiciaus and their patients through the Oklahoma State Heart Association.

14. GEORGE H. KIMBALL, M.D.
Oklahoma City
Plastic Surgery.
Exhibit will consist of photographs and colored slides on plastic surgery.

15. WILLIAM K. ISHMAEL, M.D., J. N. OWENS, JR., M.D., J. R. STACY, M.D., OPAL BETTY WATERS, R.N. AND ARTHUR A. HELLBAUM, M.D.
Oklahoma City
Diseases of Bones.
Group viewboxes will be arranged with translucent panes over which are placed x-rays and translucent type descriptions of the various diseases of bones.

16. VETERANS ADMINISTRATION HOSPITAL MEDICAL AND SURGICAL STAFF
Oklahoma City
Commisurotomy (Surgical Correction of Mitral Stenosis)

Diagnosis of Mitral Stenosis; Indictions for Commisurotomy; Cardiac Catherization of the Heart to Determine Pressure and Oxygen Saturation Content of Blood; Technique of Operation at which Left Auricle is Entered; Postoperative Studies.

17. P. E. RUSSO, M.D., J. M. PARKER, M.D., AND D. L. OESTERREICHER, M.D.
Oklahoma City
Investigation of Cause of Lymphedema of the Upper Extremity after Radical Mastectomy.

Films—venograms are made before and after surgery in cases of cancer of the breast. Certain changes have been noted of the axillary vein which we believe may be responsible for lymphedema that develops in some of these patients.

18. NATIONAL FOUNDATION FOR INFANTILE PARALYSIS
New York
Muscle Re-Education

Our exhibit consists of two panels of pictures without captions showing various stages of physical therapy from heat treatment to walking exercises.

19. J. SAMUEL BINKLEY, M.D.
CANCER OF LIP, TONGUE AND LARYNX
Oklahoma City

Clinical classification of cancer of the lip, togue and larynx by stage of the disease with five year survival curves following treatment presented by illustrated charts.

TECHNOLOGISTS, PATHOLOGISTS TO MEET MAY 3 AND 4, 1952

The Oklahoma Society of Medical Technologists, and the Oklahoma Association of Clinical Pathologists will meet jointly in annual convention at the Biltmore Hotel, Oklahoma City, May 3 and 4, 1952.

Principal speaker for the 1952 convention will be F. William Sunderman, M.D., Director of the Division of Metabolic Research of the Jefferson Medical College, Philadelphia, Pennsylvania. His subject for Saturday afternoon, May 3, will be "The Measurements of Serum Total Base and its Clinical Significance." Sunday, May 4, his subject will be "Clinical Hemaglobinometry."

Other speakers on the program will include a representative of the Oklahoma Heart Association, and Robert H. Furman, M.D., from the Oklahoma Medical Research Foundation, whose subject will be "Ultra-centrifuge Method of Lipoid Determination in Relation to Arteriosclerosis." Miss Ann Adwon, chief technologist, Mercy Hospital, Oklahoma City, will present a paper on "MacNeal's Stain for Blood Smears." Paul Snelson will discuss the Hill-Burton Hospital program in relation to the field of medical technology. Arrangements for other papers have not yet been completed.

Banquet entertainment will include a talk by Dr. Nathaniel L. Rodgers, Vance Air Force Base, Enid, Oklahoma, whose subject will be announced later. Vocal music will be rendered by Dr. William E. Hubbard and Shakesperian characterizations will be presented by Dr. Ralph W. Hubbard, both of Hubbard Hospital, Oklahoma City. The banquet will be at 7:30 P.M. on Saturday, May 3, 1952. Registration will begin at 12:30 P.M.

The Oklahoma Society of Medical Technologists is organized under the sponsorship of the Oklahoma Association of Clinical Pathologists, having three pathologists who serve as members of its Technogists, which is sponsored by the American Society of Clinical Pathologists. Its members are certified by the American Registry of Medical Techonogists, which was established by, and is under the sponsorship of the American Society of Clinical Pathologists. Pre-registration training of Medical Technologists must be in schools accredited by the American Medical Association and the American Society of Clinical Pathologists.

Members of the Oklahoma Medical Association who wish to attend these sessions will find a hearty welcome awaiting them.

SOCIAL EVENTS

PRESIDENT'S ANNUAL DINNER DANCE

Tuesday, May 20, 1952

Persian Room, Skirvin Tower Hotel



EDWIN F. ABELS

PROGRAM

6:00 P.M. Social Hour, Jade and Crystal Rooms, Skirvin Hotel

7:00 P.M. Dinner, Persian Room, Skirvin Tower
Introduction of guests and officers
Inaugural ceremonies for A. R. Sugg, M.D., Ada, President
"Sugar Pills and Quinine," an ddress by Edward F. Abels, Editor, The Lawrence Outlook, Lawrence, Kansas

9:00 P.M. Dancing, Persian Room, Skirvin Tower. Until 1:00 A.M.

dancing to the music of

HENRY KING and his orchestra

One of America's top name bands, and popular Decca recording artist, Henry King and his orchestra will offer four hours of dancing and entertainment to visiting physicians and their wives. Now playing at Houston's Shamrock Hotel, he is best known for his famous hits "Siboney," "Peanut Vender," "Say Si Si," "Cachita," "Jungle Drums," "Havana is Calling Me," and "Tabu."



HENRY KING

advance sale of tickets to the Dinner Dance . . .

Tickets to the President's Annual Dinner Dance are limited to the capacity of the Persian Room. The price will be $7.50 per person. This price includes the social hour, dinner, inaugural program, and the Henry King dance. Members may purchase tickets in advance by sending their check, payable to the Oklahoma State Medical Association to the Oklahoma State Medical Association, 1227 Classen, Oklahoma City 3, Oklahoma. Tickets will be available at the Registration Desk as long as they last.

GOLF

Those desiring to play gold may insquire at the Registration Desk and arrangements will be made for them to play golf.

PAST PRESIDENTS' BREAKFAST

A breakfast honoring all Past Presidents of the Oklahoma State Medical Association will be held Monday Morning, May 19, in the East Room, Mezzanine, Skirvin Hotel, at 8:00 A. M. An annual affair, all Past Presidents are urged to attend.

GENERAL INFORMATION

HOTEL ACCOMODATIONS

Adequate housing facilities have beeu arranged for convention visitors at six of Oklahoma City's modern and attractive hotels. For hotel accomodations please send the reservation card in this issue at the earliest date possible to the Hotels Committee, Oklahoma State Medical Association, 1227 Classen, Oklahoma City 3, Oklahoma. Please do not write hotels direct. State date of arrival, date of departure, the approximate time of arrival, type of accomodation desired (single, double, twiu bedroom, suite, etc.), and other pertinent information. In addition to first choice, please state second and third choice of hotels. As scientific sessions will be held in the Auditorium, there will be no headquarters hotel, but all hotels are within easy walking distance of the Municipal Auditorium.

REGISTRATION

Registration will open Monday, May 19, iu the Zebra Room of the Municipal Auditorium at 8:30 A. M. Delegates may register both for the House of Delegates and the General Meeting, in advance on Sunday, May 18 on the Mezzanine of the Municipal Auditorium, beginning at 12:00 Noon. Those in attendance, other than Delegates, may register in advance, Municipal Auditorium, beginning at Noon Sunday, May 18. Members must present their 1952 membership card in the Oklahoma State Medical Association. No dues for 1952 will be accepted at the registration desk except from county society secretaries. Visiting physicians from other states, members of the armed forces, interns, residents, etc. will be accorded guest privileges.

PAST PRESIDENTS' BREAKFAST

A breakfast honoring all Past Presideuts of the Oklahoma State Medical Association will be held Monday Morning, May 19, in the East Room, Mezzaniue, Skirvin Hotel, at 8:00 A. M. An annual affair, all Past Presidents are urged to attend.

ALUMNI ASSOCIATION

At 5:00 P. M. Sunday, May 18, members of the University of Oklahoma School of Medicine Alumni Association will meet in the O. U. Medical School Auditorium. All physicians and their wives attending the Anuual Meeting are invited to attend. Following the program at the Medical School, the classes of 1942, 1932, 1922, and 1912 will hold their 10 year reunions.

RELATED MEDICAL MEETINGS

Many specialty organizations and other related groups plan scientific aud business meeting immediately before and during the course of the 59th Annual Meeting. The first of May the Medical Technologists organization will hold its state conveution in Oklahoma City and the program appears elsewhere in this issue. The Medical Assistants Society will meet May 17 and 18 at the Biltmore and the Oklahoma Rheumatism Society is holding its annual session at the Biltmore May 18. Programs of both organizations appear in this issue. The Alumni Association of the University of Oklahoma School of Medicine will meet Sunday, May 18, at 5:00 P. M. at the Medical School with 10 year class reunions scheduled for that evening.

MEMBERSHIP INVITED TO HOUSE OF DELEGATES

All physicians interested in forming an Oklahoma Chapter of the American Diabetes Association are invited to attend a breakfast at the Biltmore Hotel, Room 207, at 8:00 A. M., Tuesday, May 20.

Members of the Association who are not Delegates or Alternates are especially invited and urged to attend the session of the House as spectators. The House of Delegates will convene at 1:00 P. M., Sunday, May 18, in the Hall of Mirrors, Municipal Auditorium. The Hall of Mirrors provides ample space for seating the House of Delegates and as many others as may desire to attend.

PANEL DISCUSSION QUESTIONS

Question boxes will be provided for the collection of questions to be presented to the members of the panel for the various discussions each day.

AMERICAN DIABETES ASSOCIATION

All physicians interested in forming an Oklahoma Chapter of the American Diabetes Association are invited to attend a breakfast at the Biltmore Hotel, Room 207, at 8:00 A. M., Tuesday, May 20.

WOMAN'S AUXILIARY
to the
Oklahoma State Medical Association

SKIRVIN HOTEL — MAY 18-21 — OKLAHOMA CITY



MRS. ARTHUR A. HEROLD



MRS. DONALD L. MISHLER



MRS. JOHN A. WRENN

SUNDAY, MAY 18, 1952

THEME: "A Challenge for You in '52"

1:00-3:00—Registration, Mezzanine Floor, Skirvin Hotel

6:00—Buffet Dinner for the Executive Board, Honor guests, and those helping in the convention plans.
Home of Mrs. Onis Hazel
1704 Elmhurst
Nichols Hills

8:00—Executive Board Meeting
Home of Mrs. Onis Hazel

MONDAY, MAY 19, 1952

THEME: "A Challenge for You in '52"

8:00—Past Presidents' Breakfast
Regency Room
Skirviu Hotel

9:00—Registratiou, Mezzanine Floor, Skirviu Hotel
Information, Mezzanine Floor, Skirvin Hotel

10:00—General Meeting—Mrs. Donald L. Mishler, presiding
Contineutal Room
Skirvin Hotel
All members and visitiug physiciaus' wives welcome.
Call to order—Mrs. Douald Mishler, President of the Woman's Auxiliary to the Oklahoma State Medical Association.
Pledge of Loyalty

10:05—Invocation—Mrs. C. F. Paramore, Shawnee, Okla.

10:10—Greetings—Dr. L. Chester McHenry, President of the Oklahoma State Medical Association.

10:15—Roll Call by Couuties—Mrs. George H. Garrison, Secretary-Treasurer of the Woman's Auxiliary to the Oklahoma State Medical Association.

10:25—Reading and Adoption of Minutes.

10:30—Introduction of State Officers, Committee Chairmen, County Presidents and guests.
Presentation of reports of all officers
Mrs. Douald Mishler

10:20—Report of the Nominating Committee:
Mrs. John Wreun
President-elect of the Womau's Auxiliary to the Oklahoma State Medical Associatiou

11:25—Dr. Alfred Sugg, Presideut-elect of the Oklahoma State Medical Association
Ada, Oklahoma

11:50—Annouucements—Mrs. Onis Hazel
Conveutiou Chairman

TUESDAY, MAY 20, 1952

THEME: "A Challenge for You in '52"

9:00—Registration—Mezzanine, Skirvin Hotel
Informatiou—Mezzanine, Skirvin Hotel

10:00—General Meeting, Mrs. Donald L. Mishler, Presiding
Call to Order

10:15—Invocation—Mrs. S. E. Johnson, Muskogee, Okla.

10:10—Report of Credentials

10:15—Rill Call of Voting Delegates, Mrs. George Garrison

10:30—Mrs. Ridings E. Lee, Vice-President of Southern Medical Auxiliary,
Dallas, Texas

10:50—Unfinished Business

11:00—Memorial Service—Mrs. W. K. West,
Oklahoma City, Oklahoma

11:10—New Business

11:20—Dr. James Stevenson, Delegate to the American Medical Association,
Tulsa, Oklahoma

11:40—Election of Officers

11:55—Installation of Officers, Mrs. Hugh Perry, Past President of the Oklahoma State Medical Association Auxiliary.

12:10—Other Business

12:20—Adjourumeut

1:00—Luncheon—Style Show by Balliet's, Crystal and Balliuese Rooms, Skirvin Hotel.
Mrs. Don H. O'Douoghue, Presidinig
President of the Auxiliary to the
Oklahoma County Medical Society

7:00—Annual President Inaugural Dinuer-Dance—
Persiau Room, Skirvin Hotel

WEDNESDAY, MAY 21, 1952

THEME: "A Challenge for You iu '52"

9:30—Breakfast—Crystal Room, Skirviu Hotel.
Post Convention (School of Instructiou) Board Meeting, Mrs. John Wreun, Presiding. Iucludes all State Officers, Chairmen of Comuittees, Council Presidents aud Presideuts-Elect.

CONVENTION COMMITTEES

Convention Chairman	Mrs. Onis Hazel
Registration	Mrs. Harold J. Biuder
Tickets	Mrs. George S. Bozalis
Publicity	Mrs. Robert B. Howard
Luncheon	Mrs. Ray M. Balyeat
Transportation	Mrs. Mark R. Everett
Past Presidents	Mrs. Neil Woodward
Entertainment	Mrs. Charles Bondurant
Hospitality	Mrs. P. K. Graening

COMMERCIAL EXHIBITS

A. S. ALOE COMPANY
St. Louis, Missouri
Booth 58

Visit Booth 58 where the Aloe representative, Forrest T. Pever, will show you a cross section of the complete stock of physicians' equipment and supplies carried by the A. S. Aloe Company. Highlighted will be new model Steeline—tomorrow's treatment room furniture today—featuring body contour table top, magnetic door catches and advanced design in new decorators' colors.

AMES COMPANY
Elkhart, Indiana
Booth 33

The Ames DIAGNOSTIC KIT will be featured. This small kit, measuring 3 x 9 inches, contains CLINITEST — a test for urine-sugar, BUMINTEST—a test for albumin, ACETEST—a test for acetone, and HEMATEST—a test for occult blood. No extra reagents, equipment, or accessories are needed. This kit is designed for the physician's office, small laboratory, hospital floor use, etc. The Ames representatives, Robert W. Dafforn and Vincent J. Pigors, will be demonstrating these tests.

BAKER AUDOGRAPH COMPANY
Oklahoma City, Oklahoma
Booth 30

New hope for the overworked medical men—thanks to Audograph. In scores of hospitals throughout the country, busy surgeons, physicians, house officers, and interns have found a new and easy way to make reports on time. Simply by talking into a small microphone, findings, analyses and reports are recorded quickly, conveniently, permanently with the Gray Audograph Electronic Soundwriter, the most modern of dictating equipment. No more piling up of post-operative reports, case histories, summaries! Records keep step with performance, thanks to AUDOGRAPH. Representatives at the AUDOGRAPH booth will be C. E. Barrett and Delbert Cooper.

R. O. BEAMUS OFFICE SUPPLIES
Oklahoma City, Oklahoma
Booth 25

STENO by Crescent, a complete dictation-transcription instrument, will be introduced to the Medical Profession by the R. O. BEAMUS OFFICE SUPPLIES. We will demonstrate methods of recording letters, conferences, case histories and other data. Inter-office communication and public address features of STENO will also be explained. The instrument offers the most simple and unique method of transcribing with a minimum amount of equipment. We will also introduce the RECORDIT EXECUTIVE, a portable recording-transcribing instrument, which is an excellent STENO companion. Our representatives will be R. O. Beamus, Herb Valentine, Carl White, and Paul Blanton.

BLUE CROSS AND BLUE SHIELD
Tulsa, Oklahoma
Booth 68

Theme of the Blue Cross-Blue Shield booth will be "You're the Doctor" and will consist of a paper maché display of four life size people—two adults and two children. In addition, poster material will be attached to the sides of the booth. Miss Velma Neely will be in charge of the booth.

BURROUGHS WELLCOME & CO. INC.
Tuckahoe, New York
Booth 31



Featured at the Burroughs-Wellcome booth will be 'AEROSPORIN' brand Polymyxin B. Sulfate, a new antibiotic effective against Pseudomonas aeruginosa which destroys most other gram-negative bacilli, and 'POLYSPORIN' brand Polymyxin B—Bacitracin Ointment, a broad spectrum for all pyogenic infections including external ear infections, styes, acne, furuncles — rarely sensitizes—resistance rarely develops. Our representatives will be G. F. Allen, R. T. M. Mauch and L. H. Frierdich.

CAMEL CIGARETTES
New York, N. Y.
Booth 28

CAMEL Cigarettes will feature color slides of background data from their newest research. After weekly examinations of the throats of hundreds of men and women smoking CAMEL Cigarettes exclusively for 30 days, throat specialists reported "Not one single case of throat irritation due to smoking CAMELS."

Paul T. Allen will be the CAMEL representative.

S. H. CAMP AND COMPANY
Jackson, Michigan
Booth 39

The new Camp-Varco Pelvic Traction Belt will be presented as one of the new items this year. Clinical application of this belt will be demonstrated, presenting a method for application of traction via pelvic bones. Its action tends to increase intervertebral space (though in a limited degree) and thus decrease or remove pressure from nerve tissues being compressed. Its constant pull relaxes muscle spasm. Extremely practical, it avoids the many undesirable features and complications of skin traction, especially with adhesive. Also on display will be a complete line of Camp Anatomical Supports. Attendants, Mrs. M. Agnelly and Mr. L. Carr, will explain their scientific application and advise regarding their availability in Authorized Service departments of stores throughout the country.

CARNATION MILK COMPANY
Los Angeles, Calif.
Booth 57

You are cordially invited to visit the Carnation Company Booth 57 where you will see an attractive Trans-Illumination of the Carnation Experimental Farm near Seattle, Washington. The various uses of Carnation Evaporated Milk for infant feeding, child feeding and general diet purposes will be explained. Valuable and interesting literature will be available for you. Representatives of the company at the booth will be R. W. Kenagy, William J. Miller, Eugene Mitchell, William R. Wooton, and William A. Shulz.

CENTRAL X-RAY AND SURGICAL SUPPLY COMPANY, INC.
Tulsa, Oklahoma
Booth 11

We plan to exhibit some of the "Enlarged Image" Radiographs made with the Philips Rotating Anode Tube with the 0.3mm focal spot. Also some Philips X-Ray Equipment.

Representatives will be Dewey M. Parker and Hazel M. Parker.

CHILCOTT LABORATORIES, INC.
Morris Plains, New Jersey
Booth 47

You are cordially invited to inspect recent clinical data on the use of Peritrate, a new drug for the prophylaxis in angina, and reports dealing with the control of oral anticoagulant therapy with Simplastin. Also available is clinical information about Proloid, Tedral and Ceilothyl. Representatives at our booth will be Ireland F. Miller and Hans C. Pereson.

CIBA PHARMACEUTICAL PRODUCTS, INC.
Summit, New Jersey
Booth 59

Ciba Pharmaceutical Products, Inc. invites you to visit its exhibit, Booth 59, which will feature PRISCOLINE Hydrochloride, an adrenolytic and sympathicolytic agent that produces peripheral vasodilation. Representatives in attendance, W. H. Timmons, C. J. Wise, and L. T. Baker, will gladly discuss the role of PRISCQLINE in the treatment of peripheral vascular disease.

COCA COLA COMPANY
Atlanta, Georgia
Booth 21

Ice-cold Coca-Cola served through the courtesy and cooperation of the Oklahoma Coca-Cola Bottling Company, Oklahoma City and The Coca-Cola Company.

CONNIE'S PRESCRIPTIION SHOP
Oklahoma City, Oklahoma
Booth 35

Connie's Prescription Shop will feature Camp Surgical Supports, Lanolave and Omega Syringes. As in the past we will provide pencils and monogram complimentary match folders. Our representatives will be Mrs. Irene Altizer, Mrs. Maurice Barr and C. J. "Connie" Masterson.

CREDIT SERVICE
Oklahoma City, Oklahoma
Booth 49

Credit Service has been serving the Credit and Collection needs of the Medical Profession of this State for 17 years. We are members of the National Association of Medical and Dental Bureaus, an organization designed to study the problems of credit of the medical profession throughout the nation. The personnel at this booth, Robert R. Ses-

line, Robert F. Hughes, C. B. "Bill" Davis, are men of experience in collection problems and will be glad to discuss with you any problems you may have relative to the collection of your delinquent accounts. We are bonded with 1800 members of the American Collectors Association handling accounts throughout the United States, Canada, Alaska, Hawaii and Mexico.

DICTAPHONE CORPORATION
Oklahoma City, Oklahoma
Booth 18

Distaphone Corporation will have on display the revolutionary new machine — the TIME-MASTER. This machine records on the Magic Dictabelt an endless belt of thin flexible unbreakable plastic. It assures the clearest recording and reproduction of any plastic dictating medium. It is the easiest to use and transcribe, to mail and to file—and the cheapest. Specialized recording machines also will be displayed for use in dictating X-Ray reports, pathology work, and autopsy reports. Representatives at the booth will be M. P. Garner, district manager; C. W. Fairchild, branch manager; and D. W. Hagan, branch manager.

DOHO CHEMICAL CORPORATION
New York, N. Y.
Booth 52

Representative at the Doho Chemical Corporation booth will be Louis C. Cassell.

Doho Chemical Corporation is pleased to exhibit AURALGAN, the ear medication for relief of pain in OTITIS MEDIA and removal of Cerumen; RHINALGAN, the nasal decongestant which is free from systemic or circulatory effect and equally safe to use on infants as well as the aged; and the NEW OTOSMOSAN, the effective, non-toxic ear medication which if Fungicidal and Bactericidal (gram negative—gram positive) in the suppurative and aural dermatomycotic ears. Mallon Chemical Corporation, subsidiary of the Doho Chemical Corporation is also featuring RECTALGAN, the liquid topical anesthesia for relief of pain and discomfort in hemorrhoids, pruritus and perineal suturing.

EDIPHONE COMPANY
Oklahoma City, Oklahoma
Booth 66

Edison Televoice Means Extra Time for Doctors. The remote control features of the Edison TeleVoicewriter for Clinical Recording squarely meets the medical record problem in the doctor's office. Records made at different locations are automatically delivered in proper sequence to the secretary's desk where they can be typed and filed immediately. Edison Televoice enables the doctor to increase the quality of his records 100 per cent in one-third of the time he now spends. He often saves over one hour a day. Edison Stations, located throughout the Office, are an ever-present, constant invitation to the doctor to dispatch his thoughts as soon as his work on each patient is completed. They make it easy to do. And the ease of talking his records encourages full and adequate coverage of all useful data. Moreover, because dictation is "delivered" automatically right to the secretary's desk, all need for transporting notes and papers to her is eliminated. Clear, understandable Edison recording assures fast, accurate secretarial transcription, in typewritten form. Representatives will be E. A. Mitchell and Robert Grathwol.

EDWARDS, THE SHOE FOR CHILDREN
Philadelphia, Pennsylvania
Booth 20

Our booth will consist of a diagram on a plaque of the component parts used in Edwards quality shoes for children. All doctors are invited to stop at our booth for any information desired as to the construction and fitting qualities of Edwards shoes which we are qualified to give as this is our 52nd year of building quality shoes for children exclusively. Representatives at our booth will be Arthur W. Beeson, vice-president; and Kenneth Stoneman.

G. E. COMPANY, X-RAY DEPARTMENT
Oklahoma City, Oklahoma
Booth 22

We plan to display the new Model F Inductotherm together with the new Model Direct Writer Cardioscribe, as well as a complete line of x-ray supply items. Our representatives, J. O. Jones, C. A. Bohan, V. R. Troop and E. R. Rector, will also be on hand to explain our interesting "Maxiservice" plan. Maxiserxice is a plan whereby we enter into a monthly rental agreement on any type of x-ray diagnostic and therapeutic apparatus. This plan has been greatly revised and will prove most enticing to the doctor who wishes to take advantage of a rental plan with an option to purchase any time they so desire.

GREB X-RAY COMPANY
PICKER X-RAY EQUIPMENT AND SUPPLIES
Oklahoma City, Oklahoma
Booth 42 and "D"

The Greb X-Ray Company, who are representatives for the Picker X-Ray Corporation, will show the highly flexible PICKER CENTURY Combination Radiographic and Fluoroscopic X-Ray Unit and associated exclusive accessory items. Representatives of the company who will be in the booth are Rodney D. Smith, John M. Miller, Glenn F. Conger and Robert E. Miller.

J. E. HANGER INC.
Oklahoma City, Oklahoma
Booth 29

Our display will consist of Hanger Artificial Limbs (legs and arms) for all types of amputations, Bosworth Orthopedic Braces, and Truform Anatomical Supports, Wheel Chairs, E and J Arch supports, crutches and canes. Hanger representatives will be F. L. Lake, Mrs. F. L. Lake, Mrs. Edith Tucker, Gordon F. Johnson and Bill C. Thomas.

HOLLAND-RANTOS COMPANY, INC.
New York, N. Y.
Booth 43

You are cordially invited to inspect the Holland-Rantos display feature: Time-test Koromex Diaphragms, Jelly, Cream, etc. *for dependable conception control;* Nylmerate Jelly and adjutant Nylmerate Solution for effective low-cost treatment of vaginal trichomoniasis, moniliasis, leukorrhea. Our representative, James Zipen, will welcome the opportunity to talk with you about H-R products of special interest to you.

R. P. KINCHELOE COMPANY
Dallas, Texas
Booth 53

The R. P. Kincheloe Company of Oklahoma, Louisiana and Texas will exhibit "Keleket" X-Ray Apparatus and "Cambridge" Electrocardiographs. Our representatives will be H. H. Kirby and Q. B. Schaefer.

LANTEEN COMPANY
Chicago, Illinois
Booth 67

LANTEEN MEDICAL LABORATORIES, INC. extend a cordial invitation to visit their exhibit in Booth 67. Our representatives will be happy to discuss a recent improvement in the technique of contraception involving the LANTEEN FLAT SPRING DIAPHRAGM and JELLY, or any of the other well known LANTEEN products. W. A. Ginocchio will be our representative.

LEDERLE LABORATORIES DIVISION
AMERICAN CYANAMID COMPANY
New York, N. Y.
Booth 1

You are cordially invited to visit our exhibit in Booth No. 1, where you will find our representatives, T. B. Durham, Jr., G. E. Rose and R. T. Suprlock, prepared to give you the latest information on Lederle products.

E. LEITZ, INC.
New York, N. Y.
Booth 17

E. Leitz, Inc. will exhibit and demonstrate microscopes, photoelectric colorimeters, and other scientific instruments including the renowned Ortholux research miscroscpe with the newly designed Aristophot arrangement for photomicrographic and photomacrographic accessories, for film sizes from 35mm to 3¼ x 4¼". The Panphot universal camera microscope with combination illumination system which may be adapted for biological, metallurgical and polarized light, either transmitted or reflected, will also be demonstrated.

Paul E. Stubbs will be in charge of the booth.

ELI LILLY AND COMPANY
Indianapolis, Indiana
Booth 55

Your Lilly medical service representative, W. N. Burks, Bert Tunnell or George Moore, cordially invite you to visit the Lilly exhibit located in space 55. Featured will be a demonstration of functional packaging as an aid to medical practice. Modern manufacturing departments will be illustrated. Literature on new therapeutic developments will be available.

J. B. LIPPINCOTT COMPANY
Philadlephia, Pennsylvania
Booth 50

J. B. Lippincott Company presents for your approval, a display of professional books and journals geared to the latest and most important trends in current medicine and surgery. These publications, written and edited by men active in clinical fields and teaching, are a continuation of more than 100 years of traditionally significant publishing. J. L. Rosencrants will represent the company at our booth.

M & M DIETETIC LABORATORIES
Columbus, Ohio
Booth 63

Our representatives for Similac and Cerevim, Mel Bandle and Herbert Smith, will be most happy to discuss with you the merits and use of our products in the field of infant and child nutrition.

J. A. MAJORS COMPANY
(W. B. SAUNDERS COMPANY)
New Orleans, Louisiana
Booth 15

The W.B. SAUNDERS COMPANY, Medical Publishers, represented by their Southern Agents, J. A. MAJORS COMPANY, will occupy Space No. 15. Visiting doctors will find on display late books such as "Surgical Practice of the Lahey Clinic"; Cecil "Specialties in General Medicine"; Wechsler "Clinical Neurology", 7th edition; Callander, Anson and Maddock "Surgical Anatomy," 3rd edition; Kroger "Psychosomatic Gynecology"; Campbell "Clinical Pediatric Urology"; Meschan "Atlas of Normal Radiographic Anatomy," and many others. In charge of the booth will be Jesse Speight and Jack McClendon.

MEAD JOHNSON AND COMPANY
Evansville, Indiana
Booth 16

MEAD JOHNSON AND COMPANY, Evansville, Indiana, Booth 16, will feature Lactum and Dalactum, convenient formulas of evaporated milk containing Dextri-Maltose; three water-soluble vitamin preparations, Poly-Vi-Sol, Tri-Vi-Sol and Ce-Vi-Sol; Fer-In-Sol, a palatable highly concentrated solution of ferrous sulfate. Also Mulcin, a pleasingly flavored vitamin emulsion, for teaspoonful dosage, as well as four Pablum cereals, including Barley and Rice. Representatives in attendance, J. D. Parks and Jackson P. Adams, will be glad to furnish information regarding the above products.

MEDCO PRODUCTS COMPANY
Tulsa, Oklahoma
Booth 40

The MEDCOTRON Stimulator, for the stimulation of innervated muscle or muscle groups ancillary to treatment by massage, is a low volt generator that will generate plenty of your interest. Electric muscle stimulation is a valuable form of rehabilitation therapy. Be sure to visit our booth for a personal demonstration.

Representative will be Mark E. de Groff.

MELTON COMPANY, INC.
Oklahoma City, Oklahoma
Booth 46

The Melton Company, Inc. booth will feature physicians' supplies. We cater to doctors and hospitals in all their needs. Representatives at the booth will be Tom Brennan, Kermit Howell, Joe Snider, W. E. (Bill) Hughes, Bill Jones, and Lewis Melanson.

MID-CONTINENT SUGICAL SUPPLY COMPANY
MERKEL X-RAY COMPANY
Tulsa, Oklahoma
Booth 4

We will present surgical instruments and diagnostic and physiotherapy apparatus. Those in charge of the booth will be Fred C. Merkel, John B. Kay, Louis Reeves, Vincent Sheehan, Norman Kulsrud, Oscar Stewart, Charles Smith, Jay Paul and Bob Andrews.

MIDWEST SURGICAL SUPPLY COMPANY
Wichita, Kansas
Booth 27

Mid-West Surgical Supply Co., Inc. will exhibit the Model M SW-660 Liebel-Flarsheim F.C.C. approved and Council Accepted Short Wave Diathemy, also one Model of the famous Bovie Electro-Surgical Cutting Units and the new Beck-Lee Cardi-all direct writing Electrocardiograph, together with new Surgical and Urological innovations. Our representatives will be Fred R. Cozart, Narvin W. Cozart and Edwin E. LaFollette.

MILES REPRODUCERS COMPANY, INC.
New York, N. Y.
Booth 61

Conversation while walking, riding or flying, may now be recorded, undetected, insuring uninhibited response. *Miles patented, self-powered* "*Walkie-Recordall*" *combination, Briefcase Recorder-Reproducer,* weighing only 9 lbs., includes built-in standard batteries, requires no external wires or plugs. "Walkie-Recordall" picks up and records audible speech within radius up to 40 feet—voice whispered into microphone or telephone (2-way) Interviews, Conference, Hearings, Lectures, Investigation, Reports—Law Enforcement Agencies, Homes — Car, Train, Plane. Filmband-uninterrupted recording capacity up to four hours on each band face constitutes Case History File of individual's successive, periodic interviews and findings. Recordings costing only 3c per hour are Permanent, Indexed, Identifiable,

Filable, Mailable. Desired portion selected, spontaneously, without rewinding. Compact storage. In attendance at the booth will be J. M. Kuhlik, Chief Engineer, and Mrs. H. H. Kuhlik, Public Relations Manager.

C. V. MOSBY COMPANY
St. Louis, Missouri

Booth 56

Many new and interesting titles will be found at the C. V. Mosby Company Booth No. 56, where you are invited to visit and browse at your leisure. Among some of the recent releases are: Behrman "The Scalp in Health and Disease," Dieckamann "The Toxemias of Pregnancy," Dodson-Gilbert "Synopsis of Genitourinary Diseases," Francis "The Human Pelvis," Lichtenstein "Bone Tumors," Paschal "Visual Optics," Traut "Rheumatic Diseases in Therapy and Practice," and many others. P. J. Stovall will be in charge of the booth.

NATIONAL DRUG COMPANY
Philadelphia, Pennsylvania

Booth 48

The National Drug Company, pioneer in the clinical application of resin therapy, will feature RESION, an intestinal absorbent; RESINANT, a polyamine exchange resin for the treatment of peptic ulcer; and NATRINIL, a cation exchange resin for the control of edama. Trained representatives will be in attendance to discuss our resin preparations and other specialties; ACTH, Ammivin, AVC Improved, Benat, DTP Vaccine, Natolone, as well as any of National's vast array of pharmaceutical and bological products. Our representatives attending will be C. M. Kelly, J. W. Chalmers, and D. A. Fox.

ORTHO PHARMACEUTICAL CORP.
Raritan, New Jersey

Booth 32

ORTHO cordially invites you to visit their exhibit at Booth 32. The ORTHO display will feature PRECEPTIN^{R} Vaginal Gel, their new product for conception control, designed for use without a vaginal diaphragm. PRECEPTIN^{R} Vaginal Gel has achieved an outstanding record of clinical effectiveness and has been widely aclaimed by the medical profession. Your inquiries on PRECEPTIN^{R} Vaginal Gel are invited. Representatives will be Noble S. Birkett and George Cline.

PARKE, DAVIS AND COMPANY
Detroit, Michigan

Booth 37

Medical Service Members of the PARKE, DAVIS AND COMPANY Staff, S. L. Owens and T. C. Lee, will be in daily attendance at our commercial exhibit for consultation and discussion of the various products listed in our Pharmaceutic, Antibiotic, and Biologic Catalog. Important Specialties, such as Chloromycetin, S-R, S-R-D, Benadryl, Vitamins, Oxycel, Thrombin Topical, Hynotics, and others will be featured. You are most cordially invited to visit our exhibit with the assurance that your personal interest will indeed be very much appreciated.

CHAS. PFIZER AND COMPANY, INC.
New York, N. Y.

Booth 26

Terramycin, newest of the broad-spectrum antibiotics forms a dramatic central feature of the display of Chas. Pfizer and Co., Inc., Brooklyn, N. Y. The newest dosage forms of Terramycin are exhibited and indications for use are described. Our representatives will be John Stone, James Bradley and Murl Nance.

PHILIP MORRIS AND CO., LTD., INC.
New York, N. Y.

Booth 51

Philip Morris and Company will show the results of research on the irritant effects of cigarette smoke. These results show conclusively that Philip Morris are less irritating than other cigarettes. An interesting demonstration will be made on smokes at the exhibit which will show the difference in cigarettes. Fred Genz will be our representative at the meeting.

PHYSICIANS SALES AND SERVICE CO.
Oklahoma City, Oklahoma

Booth 14

Physicians Sales and Service Company are featuring the new PIONEER 100-100 x-ray made by the Continental X-Ray Co., Full wave rectification rotating Anode tube, tilt-top bucky table with timer, foot switch, etc. All for $4,045.00—never so much for so little. We are as close as your 'phone. Our representatives will be L. E. Gleeck, Glenn Evans and Gary Pruitt.

PIED PIPER SHOE COMAPNY
Wausau, Wisconsin

Booth 3

A display of Pied Piper juvenile shoes with large illustrations of detialed construc-

tion features developed as the result of extensive research, will comprise our exhibit. Pied Piper lasts feature three way toe room and Pied Piper Shoes are made by the Goodyear Welt Process with exclusive improvements that eliminate the need for a cork filler between inner and outer soles, thus providing greater flexibility and preserving the balance inside the shoe. Cut-open shoes will be on display. Our representatives will be J. C. Owen, Mrs. Della M. Harrold, Mrs. Lucille Kanaly, Mrs. Cinnie Bell Oldfield.

A. H. ROBINS COMPANY, INC.
Richmond, Virginia
Booth 34

The A. H. Robins Company exhibit is featuring DONNATAL, sedative - antispasmodic; and ALLBEE WITH C, capsules supplying "saturation dosage" of the water-soluble vitamins. Robins' Medical Service Representatives, Charles E. Morton and Everett L. Cook, welcome the privilege of discussing with physicians attending the Assembly these and other products in the company's line of prescription specialties.

SCHERING CORPORATION
Bloomfield, New Jersey
Booth 41

Members of the Oklahoma State Medical Association and their guests are cordially invited to visit the Schering exhibit where new therapeutic developments will be feautred. Included in this exhibit will be Prantal Methylsulfate, Schering, the first selective anticholinergic agent and Dormison, the new non barbiturate hypnotic. Schering representatives, Robert L. Opp, Ralph N. Couch and James L. Wright will be present to discuss with you these products as well as other products of our manufacture.

SEALY MATTRESS COMPANY
Memphis, Tennessee
Booth 64

Sealy will again feature the FIRM-O-REST Posturepedic mattress and foundation—the ideal adjuvant to backache therapy. It provides a flat bed with no sag, acts as a firm splint to the back, yet affords maximum comfort. The JUNIOR Posturepedic mattress and foundation, designed especially for young people between the ages of 4 and 16 years, is shown for the first time. Neil K. Barton will be in charge of the exhibit.

G. D. SEARLE AND COMPANY
Chicago, Illinois
Booth 36

You are cordially invited to visit the Searle booth where our representatives, Frank R. Cotten and Thomas R. Sellers, will be happy to answer any questions regarding Searle Products of Research. Featured will be Banthine, the true anticholingeric drug for the treatment of peptic ulcers; Dramamine, for the prevention and active treatment of motion sickness; and Alidase, Searle brand of hyaluronidase which permits subcutaneous feedings at intravenous speed. Other time proven products of Searle Research on which information may be obtained are Searle Aminophyllin in all dosage forms, Metamucil, Ketochol, Floraquin, Kiophyllin, Diodoquin, Pavatrine, and Pavatrine with Phenobarbital.

SMITH-DORSEY COMPANY
Lincoln, Nebraska
Booth 54

Smith-Dorsey extends a cordial invitation to you and asks you to make their booth your headquarters. Among the new products of research which will be featured are: 1. NEUTRAZYME SUPPOSITORIES—a new therapy for Idiopathic Pruritus Ani. 2. CALVATINE-C—offers adequate prenatal therapy in one tablet. 3. PABIRIN—an improved sodium-free salicylate for intensive therapy. 4. VAGISOL TABLETS— a unique modern therapy for Trichomonas Infections. 5. Also featured are many new Injectable Preparations. Those in charge of the booth will be J. B. Gillespie, E. S. Florberg, and B. W. Chiappini, professional service director.

E. R. SQUIBB AND SONS
New York, N. Y.
Booth 65

Squibb will feature Pentids at the Oklahoma State Medical Association annual meeting. Pentids are the new 200,000 unit penicillin tablets (buffered) formulated for the convenient T.I.D. dosage. Your Squibb representatives, R. J. Friesen, S. E. Wilson, R. A. Grantham, K. E. Lisle, J. B. Aycock and G. F. Kaiser, invite you to visit the Squibb booth to discuss Pentids and other related products.

STUART COMPANY
Pasadena, California
Booth 62

The Stuart Company will feature their three new products; Amvicel, Hematinic Fortified and Multivitamin Drops with B_{12}. They will also show other products in the nutritional field. Representatives will be Wm. Y. Durrett and James E. Parrott.

TRI-STATE PHARMACEUTICAL CO.
Oklahoma City, Oklahoma
Booth 24

An Oklahoma owned and operated pharmaceutical company distributing a line of fine pharmaceutical specialties and parenteral products. Ask our representatives, Pete Wheeler, O. D. Stuckey and Bob Honey about "Tribellatol, Salifon-C and Trinutri."

UNITED MEDICAL EQUIPMENT CO.
Kansas City, Missouri
Booth 60

The new Profexray 100 milliampere 100 kilovolt tilt table with the completely automatic control will be exhibited by the United Medical Equipment Company. Also on display will be the Cardiotron, direct writing electrocardiographic machine; actual permanent electrocardiograms will be made on Cardiotron scratch proof and moisture proof paper. Raytheon Microwave and Birtcher short wave equipment will be shown. Our representatives will be E. C. Lipsky and J. M. Stover.

U. S. VITAMIN CORPORATION
New York, N. Y.
Booth 44

See the "oil-in-water" demonstration of liposoluble vitamins A and D made completely water soluble . . . a vitamin technical achievement originated and developed by the U. S. Vitamin Corporation Research laboratories. Three pharmaceutical firsts . . . Vi-Syneral Vitamin Drops — multivitamins in drops solution; Vi-Syneral Injectable— multivitamin parenteral solution and now Vi-Aqua Therapeutic — aqueous multivitamins in capsules . . . for more rapid absorption, greater therapeutic activity, shorter treatment time. We cordially invite you to our booth for detailed literature and professional samples. Our representative will be John P. Buchanan.

UPJOHN COMPANY
Kalamazoo, Michigan
Booth 23

It is the sincere desire of the Upjohn Company to make some definite contribution to the success of the 1952 meeting. Stop by at Booth 23 to relax and discuss topics of mutual interest with our representatives, Art Bowman, Preston Walker, Paul Ballew, John Frye and Bill Johnston.

VAISEY-BRISTOL SHOE COMPANY, INC.
Rochester, New York
Booth 13

Representative John Matherly will explain the diagnostic value of Jumping Jack shoes and the criteria for determining whether the early walking child is strengthening his foot by proper foot function or is possibly damaging it by walking poorly. Jumping Jack shoes are not "corrective" shoes but representatives are equipped to discuss therapeutic wedging which may be installed in the shoes by prescription. Of especial interest is the Sincock system of determining the precise amount of correction needed to rectify a faulty gait. Many doctors have lauded Doctor Sincock's empirical method as "genius."

WINTHROP-STEARNS, INC.
New York, N. Y.
Booth 38

WINTHROP-STEARNS, INC., New York, invite you to visit booth No. 38, where the following products will be featured—TELEPAQUE, the new, highly effective and well tolerated oral cholecystopaque medium. Gives denser, clear cut pictures of the gallbladder and, in a substantial number of cases, also permits visualization of the biliary ducts; NEOCURTASAL Iodized, trustworthy salt without sodium, with the addition of 0.01 per cent potassium iodide; MILIBIS SUPPOSITORIES, new, highly effective specific against trichonomonal, monilial, bacterial (nongonococcal) and mixed vaginitis. P. R. Kirk, V. C. Moreland and G. W. Shilling will be in charge of the booth.

WYETH, INC.
Philadelphia, Pennsylvania
Booth 45

Wyeth Incorporated extends to you a cordial invitation to visit the Wyeth booth at the May meeting of the Oklahoma State Medical Association. Featured in this exhibit will be THIOMERIN^{R}, a recently developed mercurial diuretic for subcutaneous injection, and WYDASE^{R}, Wyeth's highly purified hyaluronidase which has proved so useful in office practice for the treatment of ankle sprains. simple fractures, hematomas, tendinitis and bursitis. Trained representatives will be on hand to discuss and supply literature concerning many other widely prescribed Wyeth ethical specialties as Ironate^{R}, Sevetol^{R}, Sebella*, Beplete^{R} with Belladonna, Phenergan^{R}, Sulfose^{R}, Amphojel^{R}, Pondets^{R} and Tubex^{R}. *Trademark.

Our representatives will be T. J. Vaughn, W. W. Bush, H. K. Lloyd, C. Tredway, R. Parr, A. Kincaid, M. Brown, R. Woods, and H. A. Dicken.

OKLAHOMA RHEUMATISM SOCIETY

Biltmore Hotel

SUNDAY, MAY 18, 1952

8:30 A.M. Registration

9:00 A.M. Experience with Intra-Articular Administration of Compound F
J. N. Owens, Jr., M.D., Oklahoma City

Home Care in Arthritis
S. Y. Andelman, M.D., Tulsa

Low Dosage Terramycin and Other Antibiotics
J. R. Ricks, M.D., Oklahoma City

Degenerative Arthritis of Cervical Spine
M. D. Levy, Jr., M.D., Houston, Texas

12:15-2:00 P.M. Luncheon—Questions and Answers

2:00 P.M. Recent Orthopedic Developments in Arthritis, Including Osteotomy of the Spine in Spondylitis
E. D. McBride, M.D., Oklahoma City

Activities of Arthritis and Rheumatism Foundation
Gideon K. deForest, M.D., New York, N. Y.

Roundtable discussion on recent drugs and development of treatment of arthritis, including nitrogen mustard, pregnancy plasma, etc.
M. D. Levy, M.D., E. Goldfain, M.D., W. K. Ishmael, M.D. and Doctor Richardson.

LIFE MEMBERSHIP

(TEMPORARY PROVISIONS)

Petitions for Life Membership under temporary provisions of the By-Laws, Chapter I, Section 3, sub-section (C), have been filed in the Executive Office for the following and the Council recommends their approval by the House of Delegates:

H. D. Boswell, M.D.....Henryetta
Elizabeth Chamberlain, M.D.....Bartlesville
J. B. Clark, M.D.....Coalgate
J. E. Cochran, M.D.....Byars
Robert D. Cody, M.D.....Centrahoma
Emory S. Crow, M.D.....Olustee
Henry A. Ellis, M.D.....Kiowa
Alfred H. Hathaway, M.D.....Mountain View
Finis W. Henderson, M.D.....Tulsa
Walter Johnson, M.D.....Ardmore
J. L. Lehew, Sr., M.D.....Pawnee
Silas S. Mohrman, M.D.....Tulsa
L. C. Presson, M.D.....Tulsa
M. B. Scott, M.D. (Deceased).....Delaware
Barton H. Watkins, M.D.....Hobart
Llewellyn G. Wolf, M.D.....Okarche

AMALGAMATIONS

The following have made application for amalgamation. All requirements have been met and the petitions are in order for presentation to the Council and House of Delegates:

Cherokee-Adair Counties.
Cleveland-McClain Counties.
Hughes-Seminole Counties.

LIFE MEMBERSHIP

Petitions for Life Membership have been filed in the Executive Office for the following and the Council recommends their approval by the House of Delegates:

W. T. Andreskowski, M.D.....Elk City
Udonna C. Boon, M.D.....Chickasha
Leo F. Cailey, M.D.....Oklahoma City
Wm. H. Cook, M.D.....Chickasha
Thomas B. Coulter, M.D.....Tulsa
George M. Davis, Sr., M.D.....Bixby
John L. Day, M.D.....Woodward
D. S. Downey, M.D.....Chickasha
Thomas H. Flesher, M.D.....Edmond
H. R. Haas, M.D.....Sapulpa
L. A. Hahn, M.D.....Guthrie
Richard R. Johnson, M.D.....Sand Springs
William LeBlanc, M.D.....Ochelata
D. W. LeMaster, M.D.....Wayne
S. B. Leslie, M.D.....Okmulgee
J. C. Matheney, M.D.....Okmulgee
W. C. Mitchener, M.D.....Okmulgee
Silas Murray, M.D.....Tulsa
Daniel Perry, M.D.....Tulsa
Robert E. Lee Rhodes, M.D.....Tulsa
Winnie M. Sanger, M.D.....Oklahoma City
Joseph G. Smith, M.D.....Bartlesville
L. M. Westfall, M.D.....Oklahoma City
C. O. Williams, M.D.....McAlester

HONORARY MEMBERSHIP

Petitions for Honorary Membership have been filed in the Executive Office for the following and the Council recommends their approval by the House of Delegates:

F. W. Ewing, M.D.....Muskogee
George A. LaMotte, M.D.....Oklahoma City
Horace Reed, M.D.....Oklahoma City
L. S. Willour, M.D.....McAlester

COUNCILOR REPORTS

ANNUAL REPORT OF COUNCILOR, DISTRICT NO. 1

To the House of Delegates,

Oklahoma State Medical Association:

As Councilor of the First District, in accordance with the By-Laws of the Oklahoma State Medical Associatiou, I herewith submit my annual report:

Since our last report, Dr. Felix Adams of the State Hospital at Viuita was host to the members of District No. 1 at which meeting Dr. Ralph McGill gave an interesting talk on "The State of the Practice of Medicine." Doctor Adams and staff, after a very fine meal, showed the visiting doctors over the beautiful and efficiently run hospital which he heads.

Dr. L. C. McHenry was a guest of the Ottawa-Craig and the Washington-Nowata Installation Banquet. Doctor McHenry in his speech gave the Woman's Auxiliary much of the credit for the success of the O.S.M.A.

The doctors of the Ottawa-Craig Society held their 40th "Wild Game Dinner" at Ben's Cabin, on Graud Lake. Medical subjects were meticulously avoided but the dinner was well attended by doctors from the First District, Arkansas and Missouri. This Society deserves great credit in promoting the fraternity and excellent fellowship amoug members of our great profession.

Respectfully submitted,
Forrest E. Etter, M.D.
Councilor, District No. 1

ANNUAL REPORT OF COUNCILOR, DISTRICT NO. 3

To the House of Delegates,

Oklahoma State Medical Association:

In accordance with the By-Laws of the Oklahoma State Medical Association, I respectfully submit herewith, the anuual report of the activities of the Third Councilor District for the fiscal year 1951:

During the past year your councilor has served as a member of the Executive Committee of the Council, and has attended all meetings of the Council with the exception of one when it was impossible for me to attend.

In October, 1951, Life Certificates were presented to the following in Logan County: N. L. Cornwell, M.D.; Dan F. Gray, M.D.; and C. S. Petty, M.D.

A sincere effort has been made during 1951, to clear up the remaining delinquent Association members who had not paid the 1951 State and A.M.A. membership dues. At the beginning of this drive, there were only five such members in the Garfield-Kingfisher County District.

I am sure that each and every District Councilor has been interested in and taken an active part in the development of Blue Shield and Blue Cross.

Under date of November 19, 1951, I. V. Hardy, M.D., of Medford, Oklahoma, was presented his 50 Year Pin and Life Certificate. This was done as a part of a celebration held by the Medford Community honoring Doctor Hardy and Mrs. Hardy for their many years of service given to the community.

Respectfully submitted,
Bruce R. Hinson, M.D.
Councilor, District No. 3

ANNUAL REPORT OF COUNCILOR, DISTRICT NO. 7

To the House of Delegates,

Oklahoma State Medical Association:

As Councilor of the Seventh District, in accordance with the By-Laws of the Oklahoma State Medical Association, I herewith submit my annual report:

The source of POWER of any kind is ORGANIZED EFFORT. Not only has the management of industrial enterprises efficiently organized iudividual workers, but in many instauces, merges of industry have been effected in such a manner and to the end that these combiuations, such as the United States Steel Corporation for example, have accumulated almost unlimited power in that field.

Practically every doctor in these United States realizes the value of organized effort if he will stop to think. Yet we have many doctors right here in Oklahoma who have either refused or else have forgotten or neglected to pay in their State and National dues to their orgauization which is the only opportunity we as doctors have to exert auy degree of ORGANIZED EFFORT. If there ever was a time when we doctors needed ORGANIZED EFFORT, it is now. Divide and conquer will always be one of the best weapons of our would-be masters.

One may hardly glance at the news of a day's events without seeing a report of some business, industrial or fiuaucial merger, bringing under one mauagement enormous resources and thus creating great power. Kuowledge, general in nature and unorganized, is uot power; it is only poteutial power—the material out of which real power may be developed. Every form of euergy aud every species of animal or plant life, to survive, must be organized. The oversized animals whose bones have filled Nature's bone-yard through extinction have left mute but certain evidence that non-organization means aunihilation. From the electron to the largest star in the universe; these and every material thing in between these two extremities offer proof positive that one of Nature's first laws is that of ORGANIZATION.

It is a well kuowu fact that oue of the most difficult tasks that any busiuessman must perform is that of introducing those who are associated with him to cooperate and co-ordinate their efforts in a spirit of harmony toward a common goal. POWER ORGANIZATION, and SUCCESS are practically synonymous terms. Oue grows out of the other. Therefore, any group of persons who has the knowledge and ability to develop power through the principle of harmonious effort can accomplish any reasonable aim. Oklahoma should be above the average in intelligence, and very learned so far as facts are concerned but obviously, there are mauy who have no conception of the individual benefits which could accrue to them if they would remember the laws of organized effort.

In order to make this ORGANIZED EFFORT most effective, each individual in the organization must establish for himself a set of standards of personal behavior and thoughts. About the best standard that ony of us have ever heard of is the TEN COMMANDMENTS. Can you imagine the advantages we as doctors would have if every member of our organization were to live by that standard, even partially? Think of the POWER our organization would have. It would eliminate all or most of the destructive results of GREED, JEALOUSY, ANGER, HATRED, INTOLERANCE, LYING, CHEATING, STEALING, and all of those manifestations of the lack of emotional control. It would practically eliminate the difficulties we have with mal-practice suits, and most of our other difficulties.

Our present situation in regard to the financial condition of the Blue Cross and Blue Shield is a direct result of DISHONESTY among doctors. You may say

that much of it is the fault of the managemeut of the hospitals. But the doctor who sent the patient to the hospital must sign each of those blanks. If the hospital has charged $250 for drugs and the doctor knows that the patient only had about $25.00 worth of drugs, he doesn't have to sign that blank.

Each of us "had better look at his hold-card" in regard to the financial situation of the Blue Cross and Blue Shield. If that folds up the dam is broken and the people of this country will begin to demand that the Federal Government establish "Coupulsory Health Insurance." You can easily visualize the wild-eyed glee aud the drooling mouth of the politicians who have been trying to control our collective resources for many years.

Just because most of us are eating three meals a day and able to purchase a new car occasionally shouldn't lull us to sleep and create a desire to "go it alone." We owe practically all of our advantages and progress during the last 50 years to organized medicine, the American Medical Association to be specific. Without that organization our standards of individual behavior would be about like they were 50 years ago. By the same token, if every doctor would cooperate to the limit of his or her ability with the A.M.A. that organization could help us improve the standards of our services to the American people enormously. For example, our Public Policy Committee of the A.M.A. could have a 30 minute program on televisiou once or twice a week which would tell the Americau public many things which it should know about the medical services, the difficulties of the iudividual doctors; it could show the public the truth about the vast majority of malpractice suits which take place. I can see no rational reason why anything as great, good and essential as the medical services of this country should not be advertised to the fullest extent while so many worthless items are advertised over television and radio every day. The ignorance of the general public conecrning the facts about the medical services which are available to them is unbelievable. They could very easily be told if all doctors would cooperate to the limit of their abilities with the efforts of the A.M.A. I have heard some remark that they do not agree with the policies now current in the politics of the organization so that they may influence a correction of those policies instead of just "getting out of it." The chances are that they would learn enough about all of the reasons for those policies and may even agree with them by that time.

The organization is our only hope for success. That applies on down the line to the State Medical Society, each County Society and all divisions of the organization. No man has a chance to enjoy permanent success until he begins to look in the mirror for the real cause of all, or most of his mistakes.

We see doctors who are otherwise very intelligent who will tolerate no opposition to them or their opinions. If someone doesn't agree with them they get mad and walk out, pick up their marbles and go home. Don't be afraid of a little opposition. Remember that the "Kite" of success generally rises AGAINST the wind of ADVERSITY and not with it.

Respectfully submitted,

Ned Burleson, M.D.
Councilor, District No. 7

ANNUAL REPORT OF COUNCILOR, DISTRIICT NO. 11

To the House of Delegates,
Oklahoma State Medical Association:

As Councilor of the Eleventh District, in accordance with the By-Laws of the Oklahoma State Medical Association, I herewith submit my annual report:

Councilor activities of the Eleventh District have consisted entirely of attending meetings of the Atoka, Bryan, Coal and the McCurtain, Choctaw, Pushmataha counties societies for the purpose of detailing the activities of the Council.

There is no particular problem within these societies.

There is a continuing need for missionary work to explain the objections and accomplishments of the State Association and of the A.M.A. A great deal of misunderstanding and resistance to the present dues exists due to lack of knowledge.

The Atoka, Bryan, Coal Counties Auxiliary is very active and their influence in the field of Public Relations is most gratifying. The Auxiliary of the McCurtain, Choctaw, Pushmahata County Society has not been as active as in previous years.

Respectfully submitted,

Alfred T. Baker, M.D.
Councilor, District No. 11

PHARMACEUTICALS
A complete line of laboratory controlled ethical pharmaceuticals. Chemists to the Medical Profession since 1903.
ZEMMER
THE ZEMMER CO., PITTSBURGH 13, PA.
OK-5-52

COSMETIC DERMATITIS?
Clinical tests confirm the use of AR-EX Cosmetics for hyper-sensitive skins. Scented or Unscented. Send for Free Formulary.
AR-EX HYPO-ALLERGENIC COSMETICS
Free Diagnostic Aid
Table of cosmetic irritants and allergens — an aid in diagnosing cosmetic sensitivity — sent to physicians on request. OK 4-51
AR-EX COSMETICS, INC., 1036 W. VAN BUREN ST., CHICAGO 7, ILL.

ANNUAL AUDIT REPORT

Ralph A. McGill, M.D., President
Oklahoma State Medical Association
1227 Classen Street
Oklahoma City, Oklahoma

December 31, 1951

Dear: Sir:

We have completed an audit of the financial records of the—

Membership, Journal, Annual Meeting, History of Medicine, and State Fair accounts of

THE OKLAHOMA STATE MEDICAL ASSOCIATION
Oklahoma City, Oklahoma

for the period January 1, 1951 to December 31, 1951 and submit the following exhibits herewith:

EXHIBIT "A"—Balance Sheet
EXHIBIT "B"—Income and Expense Statement
EXHIBIT "C"—Schedule of Disbursements
EXHIBIT "D"—Bank Reconciliation

We wish to thank you for this audit.

Please call on us at any time for additional service.

Respectfully submitted,
H. E. COLE COMPANY

OKLAHOMA STATE MEDICAL ASSOCIATION
Oklahoma City, Oklahoma

EXHIBIT "A"

BALANCE SHEET
December 31, 1951

ASSETS

CURRENT ASSETS	Total	Membership	Journal	Annual Meeting	History of Medicine	State Fair
Bank	$38,289.99	$36,455.22	$1,407.56	$165.34	$200.00	$61.87
Petty Cash	29.32	29.32	None	None	None	None
TOTAL CURRENT ASSETS	$38,319.31	$36,484.54	$1,407.56	$165.34	$200.00	$61.87
FIXED ASSETS						
Furniture and Fixtures	8,635.21	8,635.21				
Less Reserve for Depreciation	1,192.32	1,192.32				
TOTAL FIXED ASSETS	$ 7,442.89	$ 7,442.89	None	None	None	None
INVESTMENTS						
U. S. Government Bonds	12,398.88	12,398.88	None	None	None	None
TOTAL ASSETS	$58,161.08	$56,326.31	$1,407.56	$165.34	$200.00	$61.87

LIABILITIES

CURRENT LIABILITIES						
Accrued W.H. Tax	$ 512.78	$ 345.37	$ 167.41			
Accrued S.S. Tax	37.04	27.74	9.30			
CURRENT TOTAL LIABILITIES	$ 549.82	$ 373.11	$ 176.71	None	None	None
OPERATING RESERVE	57,611.26	55,953.20	$1,230.85	$165.34	$200.00	$61.87
TOTAL LIABILITIES and CAPITAL	$58,161.08	$56,326.31	$1,407.56	$165.34	$200.00	$61.87

OKLAHOMA STATE MEDICAL ASSOCIATION
Oklahoma City, Oklahoma

EXHIBIT "B"

INCOME & EXPENSE STATEMENT
Jauuary 1, 1951 — December 31, 1951

	Total	Membership	Journal	Annual Meeting	History of Medicine	State Fair
Cash Balance — January 1, 1951	$32,407.02	$31,528.72	$ 491.48	$124.95	$200.00	$61.87
Petty Cash	6.60	6.60				
REVENUE						
Ads	$17,785.24		17,785.24			
Dues	58,710.75	$58,710.75				
Journal Copies	22.00		22.00			
Journal Subscriptions	25.50		25.50			
Interest — U. S. Bonds	235.00	235.00				
Rent	600.00	600.00				
Roster	5.00	5.00				
Commission on A.M.A. Collections	597.38	597.38				
Reimbursements:						
Tree Spraying	5.00	5.00				
Traveling	186.83	186.83				
Furniture & Fixtures	162.27	162.27				
Public Policy Luncheon	215.22			215.22		
Telephone	37.65	37.65				
Membership Fund	7,500.00		5,000.00	2,500.00		
Annual Meeting Dinner Dance	2,507.50	32.50		2,475.00		
Annual Meeting Booth Space	4,125.00			4,125.00		
TOTAL REVENUE	$125,133.96	$92,107.70	23,324.22	9,440.17	200.00	61.87
DISBURSEMENTS — Schedule	83,428.10	52,189.24	21,964.03	9,274.83	None	None
Furniture & Fixtures	3,564.84	3,564.84				
Accruals	549.82	373.11	176.71			
W.H. & S.S. Tax	371.53	242.19	129.34			
	$38,319.31	$36,484.54	$ 1,407.56	$ 165.34	$200.00	$61.87
CASH RECONCILIATION						
Bank Balance	$38,289.99	$36,455.22	$ 1,407.56	$ 165.34	$200.00	$61.87
Petty Cash	29.32	29.32	None	None	None	None
	$38,319.31	$36,484.54	$ 1,407.56	$ 165.34	$200.00	$61.87

OKLAHOMA STATE MEDICAL ASSOCIATION
Oklahoma City, Oklahoma

SCHEDULE OF DISBURSEMENTS
January 1, 1951 — December 31, 1951

DISBURSEMENTS	Total	Membership	Journal	Annual Meeting
Annual Meeting Fund	$ 2,568.78	$ 2,568.78		
Annual Meetings				
Badges	245.73			$ 245.73
Dinner Dance	2,151.10			2,151.10
Drafting Service	25.00			25.00
Equipment & Expense	294.35			294.35
Freight	12.85			12.85
Guest Expense	664.28			664.28
Hotel	2,627.21			2,627.21
Lights & Signs	92.75			92.75
Orchestra	1,000.00			1,000.00
Printing	83.21			83.21
Programs	370.16			370.16
Rentals	857.00			857.00
Travel	851.19			851.19
Auditing	300.00	300.00		
Dues and Associations	102.00	92.00	10.00	
Express & Delivery	13.83	13.83		
Group Hospital Service	270.80	270.80		
Insurance	102.26	102.26		
Journal Fund	5,000.00	5,000.00		

LIBRARY OF THE COLLEGE OF PHYSICIANS PHILADELPHIA

Journal Engraving	442.39		442.39	
Journal Printing	11,765.79		11,765.79	
Legal	3,471.79	3,471.79		
Medical Publications	70.45	50.45	20.00	
Office Supplies & Expense	2,651.79	2,651.79		
Photographs & Certificates	152.05	141.85	10.20	
Postage	917.13	917.13		
Post Graduate Committee	3,500.00	3,500.00		
Press Clipping Service	106.30		106.30	
Refund of Dues	2,088.00	2,088.00		
Rent	3,575.00	3,575.00		
Repairs	95.25	95.25		
Safety Deposit Box	6.00	6.00		
Salaries:				
Executive Secretary	10,079.53	10,079.53		
Associate Secretary	5,400.00		5,400.00	
Editor	1,200.00		1,200.00	
Office	10,111.85	7,591.85	2,520.00	
Sign & Expense	69.50	69.50		
Sundry:				
Flowers and Miscellaneous Expense	124.25	125.25		
Electricity for Air Conditioning	120.72	120.72		
25-50 Year Pen Expense	171.68	153.44	18.24	
School of Health Conference	55.22	55.22		
Clinical Society Expense	98.31	98.31		
TAX				
Property	$ 18.95	18.95		
Employer's Tax	521.05	320.26	200.79	
Social Security	278.56	157.86	120.70	
Telephone & Telegraph	1,033.21	1,033.21		
Travel and Expense	7,670.83	7,521.21	149.62	
TOTAL DISBURSEMENTS	$83,428.10	$52,189.24	$21,964.03	$9,274.83

OKLAHOMA STATE MEDICAL ASSOCIATION
Oklahoma City, Oklahoma

EXHIBIT "C"

BANK RECONCILIATIONS
December 31, 1951

MEMBERSHIP FUND

The Liberty National Bank & Trust Co., Oklahoma City, Oklahoma

Balance per Bank Statement December 31, 1951			$36,943.40
Less Outstanding Checks:			
	Vouchers # 3489	$ 23.87	
	# 3578	36.00	
	# 3727	5.00	
	# 3856	127.31	
	# 4389	21.00	
	# 4398	275.00	488.18
Balance per Books, Dec. 31, 1951			$36,455.22

JOURNAL FUND

The Liberty National Bank & Trust Co., Oklahoma City, Oklahoma

Balance per Bank State, Dec. 31, 1951	$ 1,496.76
Less Outstanding Checks:	
Voucher # 4397	89.20
Balance per Books, Dec. 31, 1951	$ 1,407.56

ANNUAL MEETING FUND

The Liberty National Bank & Trust Co., Oklahoma City, Oklahoma

Balance per Bank Statement, Dec. 31, 1951	$ 165.34
Balance per Books, Dec. 31, 1951	$ 165.34

HISTORY OF MEDICINE FUND

The Liberty National Bank & Trust Co., Oklahoma City, Oklahoma

Balance per Bank Statement, Dec. 31, 1951	$ 200.00
Balance per Books, Dec. 31, 1951	$ 200.00

STATE FAIR FUND

The Liberty National Bank & Trust Co., Oklahoma City, Oklahoma

Balance per Bank Statement, Dec. 31, 1951	$ 61.87
Balance per Books, Dec. 31, 1951	$ 61.87

Ralph A. McGill, M.D., President
Oklahoma State Medical Association
1227 Classen Street
Oklahoma City, Oklahoma

December 31, 1951

Dear Sir:

We have completed examination of the books and records of—

THE PUBLIC POLICY ACCOUNT
of the
OKLAHOMA STATE MEDICAL ASSOCIATION

for the period January 1, 1951 to December 31, 1951, and submit herewith the following exhibits:

EXHIBIT "A"—Balance Sheet
EXHIBIT "B"—Statement of Cash Receipts and Disbursements

We wish to thank you for this audit and the courtesies extended.
Please call on us at any time for additional service.

Respectfully submitted,
H. E. COLE COMPANY

OKLAHOMA STATE MEDICAL ASSOCIATION
Oklahoma City, Oklahoma

EXHIBIT "A"

PUBLIC POLICY ACCOUNT

BALANCE SHEET
December 31, 1951

ASSETS

CURRENT ASSETS		
Cash in Bank		$ 1,346.84
Petty Cash		26.94
TOTAL CURRENT ASSETS		$ 1,373.78
FIXED ASSETS		
Furniture and Fixtures	$1,029.54	
Less Reserve for Depreciation	193.59	835.95
TOTAL ASSETS		$ 2,209.73

LIABILITIES

Operating Reserve Fund	$ 2,209.73

OKLAHOMA STATE MEDICAL ASSOCIATION
Oklahoma City, Oklahoma

EXHIBIT "B"

PUBLIC POLICY ACCOUNT

STATEMENT OF CASH RECEIPTS & DISBURSEMENTS
January 1, 1951 — December 31, 1951

Cash Balance, January 1, 1951		$ 9,856.62
REVENUE		
A. M. A. Plaques		55.00
REIMBUSEMENTS		
Group Hospital Insurance	$17.02	
School of Health Conference Expense	55.22	72.24
		$ 9,983.86
DISBURSEMENTS		
Advertising	$ 90.00	
Annual Meeting Luncheon	215.12	
Clinical Society Expense	180.00	
Entertainment	1,868.02	
Express and Delivery	457.06	
Legislative Expense	452.41	
Medical Service Society and Exhibitors' Expense	479.75	
Office Supplies and Expense	112.33	
Plaques	350.00	
Postage	53.96	
School and Health Conference	55.22	
Students A. M. A. Expense	727.24	
Subscriptions	64.00	

TAXES			
Federal Unemployment	$8.17		
Oklahoma Unemployment	8.64		
Social Security	8.10		24.91
		24.91	
Telephone and Telegraph		1,211.97	
Travel		466.93	
"Health Cases"		176.00	
"The Truth about Communism"		250.00	
"Sooner Physicians' Wife"		59.16	
"Dodger, Me? Overweight"		12.00	
"To Your Health"		840.00	
"Tell Me Doctor"		464.00	8,610.08
BALANCE			$ 1,373.78
CASH RECONCILIATION			
Liberty National Bank & Trust Company., Oklahoma City, Oklahoma			$ 1,346.84
Petty Cash			26.94
Ledger Balance — December 31, 1951			$ 1,373.78

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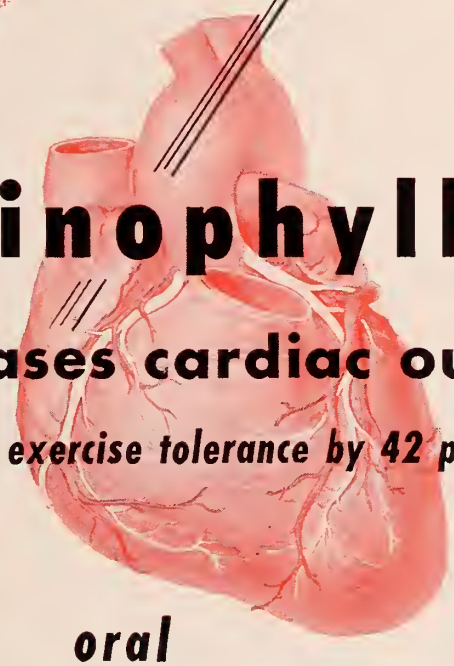
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1. Kissin, M.; Stein, J. J., and Adelmon, R. J.: Angiology 2:217 (June) 1951.
2. Rickles, J. A. J. Florida M.A. 38:263 (Oct.) 1951.

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Oklahoma State Medical Assistants Society

FOURTH ANNUAL CONVENTION

MAY 16-17-18, 1952

BILTMORE HOTEL

Oklahoma City, Oklahoma

FRIDAY, MAY 16, 1952

8:00 P.M.	CONVIVIAL HOUR—Oklahoma County Medical Assistants hostesses—Honoring our out of city guests	Room 222

SATURDAY, MAY 17, 1952

8:00 A.M.	Registration	East Room
9:00	Convention called to order	East Room
9:10	Invocation	Bonnie Swafford
9:15	Address of Welcome	Mr. Dick Graham
9:25	Response	LaVern Arnold
9:40	Skit	East Room
10:00	Guest Speaker—"Malpractice Insurance"	Mr. Roger Baimbridge
10:30	Business Meeting (Oklahoma State President)	Lucile Swearingen
12:00	Luncheon—Compliments of Credit Service—Buffet Style	Oklahoma Club
1:00 P.M.	Roll Call	East Room
1:30	Business Meeting—Election of Officers	Lucile Swearingen
	(Presentation of Award for girls traveling longest distance and County Society reports and awards.)	
4:00	Tour of the Oklahoma Medical Research Foundation Building	Mr. Hugh Payne
5:15	Adjourn	
	RECEPTION—Compliments of the Oklahoma County Medical Service Society (Place and time to be announced later.)	
7:30 P.M.	Banquet	Civic Room
8:30	Greetings	Peter E. Russo, M.D.
8:40	Response	John E. McDonald, M.D.
9:00-12:00	Dance	Lee Roberts Orchestra
	(Formals Optional)	

SUNDAY, MAY 18, 1952

9:00 A.M.	Coffee and Doughnuts	Room 222
10:00	Convention called to order	West Lounge
10:10	Invocation	Ruby Kemp
10:15	Style Show presented by ROLAND ORIGINALS	West Lounge
11:00	"Past, Present and Future Medicine"	Lewis J. Moorman, M.D.
12:00-2:00 P.M.	Luncheon—Compliments of Blue Cross-Blue Shield	Parlor "A"
2:00	Business Meeting	Lucile Swearingen
3:00	Installation of Officers	Parlor "A"
3:30	Address by new State President	Parlor "A"
4:00	Adjourn	

OFFICERS OF COUNTY SOCIETIES, 1952

COUNTY	PRESIDENT	SECRETARY
Alfalfa	C. L. Benson, Cherokee	Jack E. Fetzer, Cherokee
Atoka, Bryan, Coal	Charles F. Moore, Durant	William A. Hyde, Durant
Beckham	H. D. Speed, Sayre	O. C. Standifer, Elk City
Blaine	Robert C. Taylin, Okeene	Virginia Curtin, Watonga
Caddo	C. B. McMillan, Gracemont	E. T. Cook, Jr., Anadarko
Canadian	C. Riley Strong, El Reno	F. W. Hollingsworth, El Reno
Carter-Love-Marshall	Malcolm Horne, Ardmore	Ray Graybill, Ardmore
Cherokee	*Not Reported*	
Tri-County (Choctaw-McCurtain-Pushmahata)	*Not Reported*	
Cleveland-McClain (Amalgation pending)	Clarence Mitchell, Norman	Kirk T. Mosley, Norman
Comanche-Cotton	J. N. Mitchell, Lawton	Herbert Howard, Lawton
Creek	P. K. Lewis, Sapulpa	W. N. Hindman, Sapulpa
Custer	Paul B. Lingenfelter, Clinton	Curtis B. Cunningham, Clinton
East Central (Muskogee, Sequoyah, Wagoner, McIntosh)	William Weaver, Muskogee	Charles Fullenwider, Muskogee
Garfield-Kingfisher	E. E. Talley, Enid	Roscoe C. Baker, Enid
Garvin	John A. Graham, Pauls Valley	Hugh H. Monroe, Pauls Valley
Grady	W. W. Davis, Chickasha	Beverly C. Chatham, Chickasha
Grant	I. V. Hardy, Medford	F. P. Robinson, Pond Creek
Greer	Tom L. Wainwright, Mangum	J. B. Hollis, Mangum
Hughes	*Not Reported*	
Jackson	H. M. Bussey, Altus	E. J. Allgood, Altus
Jefferson	John B. Jacobs, Waurika	W. A. Heflin, Waurika
Kay-Noble	P. A. MacKercher, Ponca City	R. W. Gibson, Ponca City
Kiowa-Washita	J. W. Finch, Hobart	Ralph S. Phelan, Hobart
LeFlore-Haskell	G. M. Hogaboom, Heavener	Jose R. Rigual, Wister
Lincoln	C. W. Robertson, Chandler	Jack C. Mileham, Chandler
Logan	Elton Lehew, Guthrie	J. F. Souter, Guthrie
Northwestern (Beaver, Harper, Ellis, Dewey, Woodward)	Frank E. Flack, Woodward	M. C. England, Woodward
Okfuskee	L. J. Spickard, Okemah	Charles L. Reynolds, Weleetka
Okmulgee	*Not Reported*	
Oklahoma	Ralph A. Smith	L. C. Taylor, Oklahoma City Mrs. Muriel Waller, Exec. Sec'y.
Osage	W. T. Manning, Pawhuska	Cody Ray, Pawhuska
Ottawa-Craig	Charles W. Letcher, Miami	John E. Highland, Miami
Payne-Pawnee	H. G. Nelson, Stillwater	Harold R. Sanders, Stillwater
Pittsburgh	George M. Brown, Jr., McAlester	H. C. Wheeler, McAlester
Pontotoc	Rowe Bisbee, Ada	S. P. Harrison, Ada
Pottawatomie	Clinton Gallahar, Shawnee	W. M. Gallaher, Shawnee
Rogers-Mayes	Minor Gordon, Claremore	W. D. Anderson, Claremore
Seminole	Claude S. Chambers, Seminole	A. N. Deaton, Wewoka
Stephens	W. K. Walker, Marlow	W. R. Cheatwood, Duncan
Texas-Cimarron	*Not Reported*	
Tillman	W. A. Fuqua, Grandfield	O. G. Bacon, Frederick
Tulsa	Marshall O. Hart, Tulsa	Paul T. Strong, Tulsa Jack Spears, Exec. Sec'y.
Washington-Nowata	Cole D. Pittman, Bartlesville	H. E. Denyer, Bartlesville
Woods	O. E. Templin, Alva	William F. LaFon, Alva

THE JOURNAL
of the
OKLAHOMA STATE MEDICAL ASSOCIATION

EDITORIALS

A LOST GOVERNMENT

The people, once the government, have lost their sovereignty and have become slaves to the government they once possessed. They have sold their liberty and independence for subsidies and so-called security. All good citizens who are mature in mind with a normal sense of honor and integrity, are conscious of the insults heaped upon them by the bureaucrats in high places. How long must we endure the stupidity of an irresponsible, extravagant government that insists that the people cannot be trusted with their own local affairs including sacred personal interests such as making their own homes, saving their own money, and choosing their own doctors and doing their own charity.

Without consulting the people or their representatives, Mr. Truman confiscates private property, while Mr. Ewing proposes to use one man's money with which to pay another mans' hospitalization costs. In plain English it amounts to this—a man turns over to a stock buyer the estimated price of a pig. The pig is delivered. Nothing is said about the cost. But in time the man is notified of the fact there was a surplus and instead of returning it, he is using it to purchase a pig for someone else, perhaps the original purchaser's neighbor who never works and never saves, or perhaps the pig goes to a perfect stranger.

Is this gross injustice due to both deception and theft or is it the result of plain insanity. Is there any recourse? Yes, when only a pig is at stake, the offender is only a stock buyer, responsible for his acts. Not so when people are the objects of concern. Mr. Ewing is a bureaucrat. He can take our money, which should be refunded and spend it for the so-called security of others saying service will not cost us anything. That he can do this without batting an eye reveals his opinion of our intelligence.

How long, Oh Jupiter, must we endure such injustice! Shall we raise hell now and call a halt or shall we await the evil day of revolution. In the latter event, upon whose hands will the blood be?

DOCTORS AS PATIENTS

Apropos the old adage "doctors are poor patients," the late Max Pinner, M.D.,[1] a great pathologist, clinician, editor and medical writer conceived the idea of a book containing "auto-biographical sketches of disease by physicians." In correspondence with the writer in 1946 Doctor Pinner stressed the importance of broadening the term "symptoms" to include "the total subjective experience of the patient caused by the disease." This concept embraced all the emotional reactions to the patient's socio-economic conditions and his thwarted ambitions as conditioned by his disease.

This significant work interrupted by Doctor Pinner's death and later completed by his patient and friend, Benjamin F. Miller, M.D.,[1] has just come from the press.

Doctor Miller, responding to Mrs. Pinner's request that he finish the work so well begun, gives expression to his psychological gains and enlightened insight to the patient-physician relationship through his experience as Doctor Pinner's patient and more than 20 hospital admissions because of sarcoidosis.

A perusal of this interesting book should lead to a better approach to the patient as a composite whole and may in part explain why often doctors are considered poor patients. With their knowledge of disease and the inadequately explored influence of the psyche under the stress of disabling illness they weigh the attending physician with the hair trigger and occasionally find him wanting, particularly in the field of human understanding which, if fully encompassed, would render him more humane.

As a rule the knowledge of these shortcomings is artfully concealed by the physician-patient but occasionally vague, unintentional outcroppings lead to the belief that doctors are not good patients when in truth the non-conformity represents a masked recognition of the fact that doctors may prove to be poor doctors.

With discriminating philosophy, Amiel[2] said what doctors often think when they are

LIBRARY OF THE

patients. "The principle grievance which I have against doctors is that they neglect the real problem, which is to seize the unity of the individual who claims their care. Their methods of investigation are too elementary; a doctor who does not read you to the bottom is ignorant of essentials."

Perhaps Pindar was right when he said the best thing in the world is wisdom, and in default of wisdom, science. The doctor who does not intuitively divine the suffering of the soul is wanting in wisdom.

1. When Doctors Are Patients. Edited by Max Pinner, M.D. and Benjamin F. Miller, M.D. First Edition. New York, W. W. Norton and Company, Inc. 1952. Price $3.95. 2. Ameil's Journal Intime of Henri-Frederic Amiel. Translated, with an introduction and notes by Mrs. Humphrey Ward, A. L. Burt company, Publishers. Second Edition.

TUBERCULOSIS

BROWBEATEN BUT NOT WHIPPED

What the tubercle bacillus thinks of the antibiotics would make interesting reading. To date it may be said that 50 years of unceasing application of all the various preventive and therapeutic measures conceived by human ingenuity has failed to bring about full control of this baffling little bug.

There is great danger of overestimating the value of the statistical studies of the past 50 years. The phenomenal reduction in the U. S. death rate is encouraging but the whole story is not to be found in the available figures. The mortality rate as a guide has never been fully dependable.

In all probability it will require five or 10 years to determine the long range efficiency of the new therapeutic agents. In the meantime we are reducing the death rate through the prolongation of life, but the rate may rise again especially if the ultimate results of modern therapy are disappointing.

We must not forget that during World War II we sent millions of our young men into areas where the tuberculosis mortality rate was much greater than that in our own country and where infection with the tubercle baccilus was virtually 100 per cent. Many tubercle baccili returned with our men and the potential of manifest disease cannot be determined. Today our soldiers are fighting a fatiguing war in Korea where the tuberculosis mortality rate is 1,000 per 100,000 population as against our present rate of 22.2.

The never ending war in Korea with the present replacement policy will greatly augment the importation of these wary little parasites. Also we must remember that the several hundred thousand displaced persons and the estimated five million aliens who have entered the U. S. illegally, have come from areas where infection with the tubercle bacillus approaches 100 per cent. The latter slip into our country without examination. Even the routine entrance examination of the D. P.'s does not eliminate the hazards of potential disease. In spite of the phenomenal progress we have made toward the control of tuberculosis, and regardless of the uncertain possibilities of new drugs, physicians must be realistic and guard against the rising optimism that is endangering the organized agencies in the fight against this old enemy of mankind—this unpredictable bug full of tricks.

Though the mortality in this country has been cut to an all time low, it is doubtful if the battle is half won. Time alone can tell.

SUPPORT OF KING AND QUEEN

Princess Elizabeth, now Queen Elizabeth II, appeared at the Royal College of Surgeons of England and exulted in her admission to Honorary Fellowship.[1]

After an intelligent, generous and appreciative recognition of devotion she deprecated the destructive uses of new found scientific knowledge and said: "she was proud to be associated, as were her father and her mother, with this College which was doing so much to further the science and art of surgery, not only in this country but throughout the whole Commonwealth. She was especially glad to know that plans for the future included a residential college where 80 postgraduate students, many of whom would come from other parts of the British Commonwealth, might live and work."

Apparently no concealed political expediency, no suggestion of subsidy, control or coercion. How helpful it would be if those at the head of our own government could vouchsafe to us the unselfish recognition and the humane vision of the deceased King or the new Queen.

With fitting esteem the *British Medical Journal* of February 16, 1952, in leading articles extols the life of King Ceorge VI, la-

ments his death and extends homage to the new sovereign Elizabeth II.

1. Princess Elizabeth at the Royal College of Surgeons, *British Medical Journal*, December 22, 1951, page 1517.

"THE DAMNED HUMAN RACE"

Mark Twain said, "Man was made at the end of the day when God was tired."

Maybe this accounts for Somerset Maughn's words appearing as title to this editorial note.

Perhaps man's confusion, in the present cockeyed world on the verge of mass mania, is a belated testimonial to Mark Twain's observation.

Thinking people would feel more secure if they knew just what the wise Creator on his great white throne is thinking.

The pastor of a church in central London worn with the problems of the great city consulted his physician. It was discovered that because of overwork he was threatened with a nervous breakdown and was told to take time out for an extended rest. That night he dreamed that he went to Heaven. Requesting his escort to let him see God on his great white throne, they approached the throne and found God pacing back and forth in front of the throne wringing his hands. Shocked to find this evidence of frustation he said, "What in the world does this mean? Why does God seem to be so upset?"

The escort replied, "He has just received word that his servant down in London is taking two weeks off."

When so many people have deserted the ranks of religion for the camp of the Philistines, naturally it is time to wonder. Yet it is interesting to recall that when there were only three men in the world, two of them were at war.

Whether they realize it or not, it is comforting that most good physicians are still in line with the sermon on the mount.

WARNING

A SNAKE IN THE GRASS

Elmer L. Henderson, chairman of the Coordinating Committee of the American Medical Association warns the profession against the dangerous propaganda in a moving story written by Alice Tisdale Hobart and published under the intriguing title *The Serpent-Wreathed Staff.*[1]

Because of the present popular interest in the progress of medicine and surgery and the agitation concerning medical care, the author, making use of the profession's traditional emblem may command a wide reading and because of the socialistic appeal, particularly in the latter part of the novel, the readers of the Journal should know that there is such a book and should be prepared to answer any questions that may arise because of the author's adroit approach to socialized medicine and her bold advocacy of principles which would rob both patient and physician of the benefits and satisfactions inherent in medicine as a free enterprise.

On the time honored staff the serpent with a healing lick has been replaced by one with a venomous fang. Physicians should be on guard and ready to warn their patients against the poisonous bite.

It should be understood that this is not an indictment of the author's sincerity but a warning against her illy conceived medical philosophy.

1. The Serpent Wreathed Staff, Alice Tisdale Hobart, Indianapolis, Ind., The Bobbs-Merrill Company. 1951.

SUIT SETTLED

The settlement of the Beckham County Medical Society-Farmers Union Cooperative Hospital suit brings to a close another chapter in the medical history of a young state.

The controversy over the years developed many charges and counter-charges; some perhaps well founded and others loosely conceived.

Controversies in medicine are nothing new, irrespective of whether they be in the field of scientific medicine, economies or the body politic. Generally speaking, the end results of controversies oftentimes bring about advances. However, in some instances, the opposite is the end result.

Without attempting to prophesy the end result of the settlement of this controversy, it can safely be said that if both sides will continue to work toward a continued understanding of each other's problem on a mutual trustworthy basis, it is believed that there will be advancement in the spirit of medicine for not only western Oklahoma but the State as a whole.

SCIENTIFIC ARTICLES

THE EISENMENGER COMPLEX WITH A PATENT DUCTUS ARTERIOSUS: A CASE REPORT

BEN T. GALBRAITH, M.D., AND CHARLES K. HOLLAND, M.D.

McALESTER, OKLAHOMA

In 1897, Eisenmenger[1] described a type of congenital heart disease similar to the tetralogy of Fallot but differing in one important point, namely the absence of stenosis in the outflow tract from the right ventricle. The pathology, therefore, is simply a high defect in the ventricular septum, usually with overriding of the aorta. The higher pressure in the left ventricle results in a reflex of blood into the right ventricle during systole and greater blood flow through the pulmonary artery. There is also some shunting of blood from the right ventricle to the aorta which may vary greatly in amount from patient to patient or in the same patient during the course of the disease.

The clinical course of the disorder has a characteristic pattern. At birth, there is no cyanosis and the child appears normal. Several months, or more often years later, cyanosis frequently develops and thereafter the prognosis is grave, the child usually not surviving for more than 10 or 12 years after the onset of cyanosis.

Examination of the lungs in any of these cases has shown obliterative changes in the pulmonary vessels.[2]. The concept has been advanced that cyanosis is due to improper oxygeneration of blood in the lungs[2] rather than a right to left shunt of venous blood. This explanation has been challenged recently, however because of the studies in a case in which the venous blood returning from the lungs was analyzed and found to show normal oxygen saturation.[3] As might be expected, no benefit has been found from the Blalock-Taussig operation.

This case is reported because the Eisenmenger Complex is one of the rarer types of cyanotic congenital heart disease, and this case in addition had a large patent ductus arteriosus.

CASE REPORT: This 15 year old white female was first seen by us on November 11, 1951, at St. Mary's Hospital, McAlester, Oklahoma. Her mother stated that she had "a little cold" and had been listless for about a week previously. She had gone to Sunday School that morning and returned home complaining of being tired and not feeling well. After coming out of the bathroom, she collapsed, lost consciousness for about three minutes, and became very blue and dyspneic. Her parents brought her to the hospital immediately.

The past history revealed that she was the youngest of three children. There were no notable complications at the time of the mother's pregnancy or birth of the child. The mother did not have German measles during pregnancy. She appeared to be a normal child in every way until about four or five years of age when she began to have "spells" of cyanosis and dyspnea on exertion. No "squatting" after exercise was recalled. The family physician described a "heart murmur" at this time. She attended school and engaged in most of the activities of a girl of her age except that strenuous exercise was avoided. She was examined by two other physicians who said she had a heart murmur which, according to a brief office record, was a loud apical systolic mumur. It was suspected that she might have rheumatic fever. At age 11, a tonsillectomy was done. She was said to have tolerated the anesthetic poorly. A few months after the tonsillectomy, a mass was found in the left side of her neck that was excised and found to be a branchial cleft cyst. She continued to go to school and develop fairly normally except for mild syanosis and dyspnea after unusual exertion. She failed to menstruate although her breasts enlarged and her body configuration was essentially normal for a girl of her age. Her two older brothers were healthy and there was no known incident of congenital heart disease in the family.

Physical Examination: The patient was a well nourished girl of stated age who was somewhat small in stature. She was moderately dyspneic, lying at rest. There was moderate cyanosis of the face, neck and nail beds. The lungs were normal to auscultation and percussion. The heart was not enlarged. A shock was palpable over the pulmonic area synchronous with the second heart sound. The pulmonic second sound was markedly accentuated. Heart rate was 130 per minute with regular rhythm. There was a Grade I or II soft systolic murmur at the pulmonic area. The femoral, radial and brachial pulsations were normal and equal. Blood pressure in m.m. of mercury was 130/80. The liver and spleen were not palpable. There was no ascites, edema, nor clubbing of the digits. Innumerable petechiae were present over the entire body.

Laboratory data: Rbc 7,240,000; hemoglobin 134 per cent; Wbc,11,700; neutrophils, 74; lymphocytes, 24; eosinophils, 2. Serologic test for syphilis was negative. Urinalysis was normal chemically and microscopically. The arm to tongue circulation time with Decolin was ten seconds.

Chest fluoroscopy showed increased prominence and convexity of the pulmonary artery segment of the cardiac silhouette. In the PA view, the portion of the right heart border which is formed by the right auricle projected further laterally into the right lung field than is usually seen. The hilar vascular shadows were moderately increased but no expansile pulsations nor hilar dance were detected. There was no enlargement of the left auricle in any view. The conclusions were: 1. Dilatation of the pulmonary artery; enlargement of the right ventricle and right auricle.

Electrocardiogram: There was prolongation of PR interval to a .22 of a second. The limb leads showed marked right axis deviation. The P waves were unusually tall. The precordial leads were consistent with right ventricle hypertrophy.

Hospital Course: The patient was kept at bed and given phenobarbital to allay her apprehension and restlessness. After the exertion of cardiac fluoroscopy on the second hospital day, she became critically dyspneic and cyanotic. This improved after 10 or 15 minutes of rest, oxygen by mask, and morphine gr. 1/8. The temperature ranged between 99 and 100 degrees. The diagnostic impression at this time was congenital heart disease, probably the Eisenmenger Complex. It was thought that a thrombus had probably formed somewhere in the heart or pulmonary circulation so as to increase the right to left shunt of blood and explain the abrupt change for the worse. Arrangments were made to send the child to Barnes Hospital, St. Louis, Mo., if her condition improved sufficiently to tolerate the trip, so that she might be further studied and appropriately treated if treatment was possible. On the third hospital day, she was more deeply cyanotic and a phlebotomy withdrawing 400 cc. of blood was done with some difficulty because of hypercoaguability of the blood. There was no definite change after the procedure. On the fourth hospital day, she became critically syanotic and died despite 100 per cent oxygen by mask and later under positive pressure.

Autopsy: The significant findings were limited to the chest. There was a large patent ductus arteriosus measuring 1.5 cm. The right ventricle of the heart was markedly thickened and dilated. The right auricle was also markedly dilated. There was no obstruction in the outflow tract of the right ventricle or pulmonary artery, indeed the pulmonary artery was considerably dilated. There was a large high ventricular septal defect that easily admitted a finger. The aorta took origin from both ventricles. No ante mortem thrombi or emboli were found in the heart or major pulmonary vessels. Unfortunately, no miscroscopic sections of the lungs were taken.

Anatomical Diagnoses: 1. High ventricular septal defect with overriding aorta; right ventricular hypertrophy; no pulmonary stenosis (the Eisenmenger Complex). 2. Patent ductus arteriosus.

Discussion: This case illustrates the usual course of this congenital heart defect, which is characterized by the delayed appearance of cyanosis and dyspnea with usually progressive symptoms and fatal termination. The cyanosis is thought by many to be due to changes in the pulmonary vascular tree and not a right to left shunt of venous blood. No satisfactory corrective or paliative treatment of this disorder has been devised.

The patient did not have the usual machinery type of systolic and diastolic murmur heard in cases of patent ductus arteriosus, but the occasional absence of this sign is well recognized. Because of the higher pressure in the pulmonary circuit, the blood flow



FIGURE 1. Chest x-ray taken one year before death. Prominent pulmonary artery segment present at that time. The right auricular enlargement seen at fluoroscopy is not present in this film.

through the ductus may not have been great despite its large size. Indeed, the blood flow may have been from the pulmonary artery to the aorta during the terminal episode of marked cyanosis.

Conclusions:

1. A case of the Eisenmenger Complex with a large patent ductus arteriosus is presented.
2. The Eisenmenger Complex should be suspected in a child that develops cyanosis several months or years after birth.

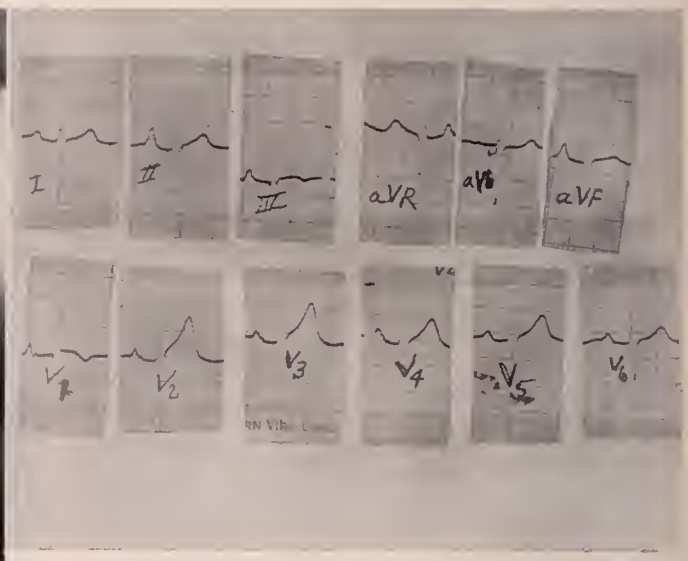


FIGURE 2. Electrocardiogram taken three days before death. Note prolonged AV conduction, tall peaked P waves and prominent R waves in right sided chest leads with a small Q in V1.

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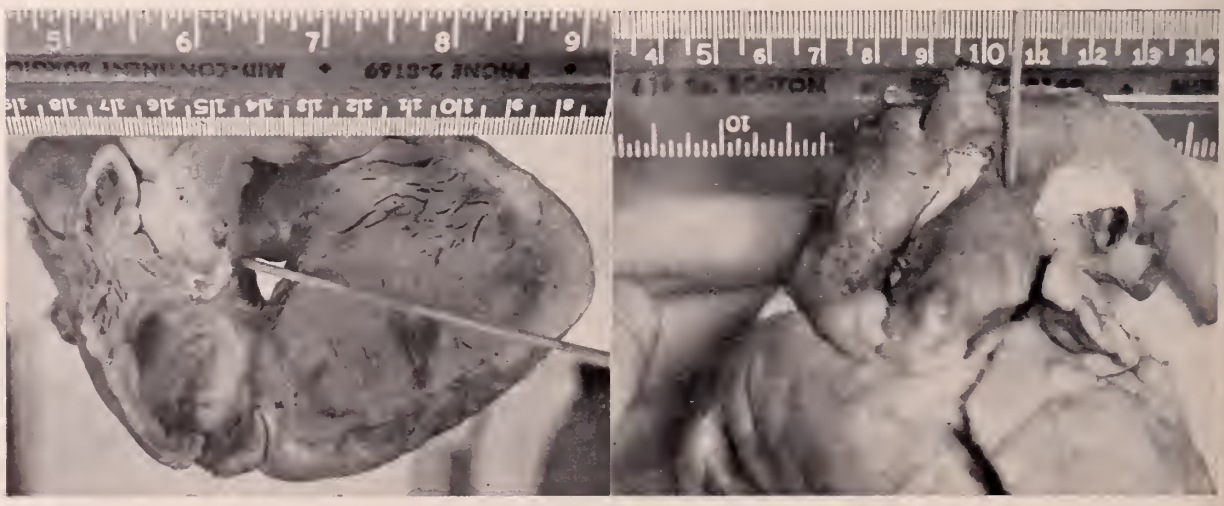


FIGURE 3. View of the right ventricular side of the septum to show the large defect. Just above the ventricular septal defect is the dilated pulmonary conus. The wooden applicator is projected into the aorta to demonstrate the overriding.

FIGURE 4. View of the heart to show the large patent ductus which is designated by the probe. Note the large size of the ductus and the pulmonary artery.

CHOLESTEROL AND ATHEROSCLEROSIS*

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During the past few years we have seen the terms cholesterol and atherosclerosis closely linked together in many investigative studies. This has been due mainly to the fact that a higher than normal serum cholesterol was found by one investigator in a majority of cases of his series of coronary sclerosis, and also to the emphasis on a certain group of diseases in which high cholesterolemia and atherosclerosis are associated.

Many of us have been especially interested in this subject although we have been limited in our efforts at investigative work. In an effort to clarify these correlations, a review of the literature, particularly investigative articles, has been made in order to understand any application that there might be to the clinical management of our patients. It is upon such a basis that this paper is presented.

Cholesterol is chemically an alcohol, related to the steroid substances which include beside the sterols, the D vitamins, bile acids, sex hormones, saponins, glucosides of digitalis, carcinogenic substances, and the so-called "organizers of the embryo."

It is an essential of all body fluids and body cells; an important means of transportation of fatty acids in the blood; a precursor of cholic acid; an important source of Vitamin D; and a biological precursor of the steroid hormones.

It aids in the absorption of fatty acids with bile salts and bile acids; it is normally present in the neural sheaths where it acts as an insulator along the entire sheath. It may have a role in cell permeability and in immunologic reactions. The red blood cells are more susceptible to breakdown in a depletion of cholesterol.

We can understand then that it is a very complex and important substance, with a relationship to varied and essential body functions.

Cholesterol is obtained for use in the body from two sources: exogenous and endogenous. The exogenous source is by ingested food high in cholesterol, namely, milk, butter, cheese, egg yolk, oysters, animal fats, brains, liver, and sweetbread. The endogenous sources are from the liver, skin, and intestine. The liver apparently has the ability to synthesize cholesterol from the carbohydrate, protein, and fat of the body. The method by which the liver accomplishes this is still unknown.

The blood serum cholesterol is elevated, in most instances, in a number of diseases, none of which seem to have anything else in common except this elevation and atherosclerosis. These diseases are diabetes, nephrotic stage of nephritis, myxedema, obstructive jaundice, and xanthomatosis. We might also add another as a possibility—coronary sclerosis.

There are only a few experimental facts that all are agreed upon: it has been definitely proven that high cholesterol feedings will elevate the serum cholesterol; atherosclerosis can occur with a normal or below normal serum level; the serum cholesterol is variable in individuals, and at different times of the day, usually being highest about four hours after the meal; absolute starvation will not cause a lowering of the level, on the contrary a higher than normal will occur. The blood serum level can usually be reduced by a fat free diet, a low cholesterol diet, by coating the bowel with mineral oil, and by two foods—the so-called "decholesterolizing foods"—artichokes and egg plant. The reason for this action by these two foods is unknown. There is usually decreased cholesterol level in infections and steatorrhea.

Certain families seem to have a higher level of blood cholesterol than that which is classed as normal, and without apparent shortening of life or more susceptibility to atherosclerosis.

It has also been shown that some substances such as inositol, choline, methionine, and pyridoxine seem to act as decholesterolizing agents.

It seems that the exogenous sources can at least be partially controlled, but as yet we have no way to control the endogenous.

Summarizing this general problem Doctor Paul White and his associates, in the study of diet, serum cholesterol, and coronary artery disease pointed out these facts:

*Presented before the Washington Birthday Conference in Oklahoma City, February 22, 1952, and the Arkansas-Oklahoma Regional Meeting of the American College of Physicians, Hot Springs, Arkansas, September 29, 1951.

First, that the assumption has been that the serum cholesterol was the cause of coronary artery disease.

Second, that the serum cholesterol was dependent on the cholesterol of the food intake.

Third, that coronary artery disease is higher in Americans than in Orientals, which has not been scientifically proven.

Fourth, that in that group of diseases with high cholesterolemia it was also assumed that the high serum cholesterol was the cause of the atherosclerosis.

In his series of coronary and non coronary groups fed low cholesterol diets he was unable to see that any advantage was gained.

On the other hand some investigators have claimed the opposite—that they did find a relationship of high cholesterol diets to the incidence of coronary sclerosis.

At one time it was felt that hypertension was the probable cause of atherosclerosis. Now it is felt that they are often associated, but that neither is the cause of the other.

We are told that among the daily nutritional needs of our bodies are certain essential foods such milk, butter, egg, and meat. These foods are also high cholesterol foods.

It is difficult to understand, with our present knowledge of cholesterol, with its many essential body functions known and perhaps many unknown, how we can say that atherosclerosis can be prevented by attemping to keep a low serum cholesterol, either by food intake, by feeding decholesterolizing foods, or by prescribing certain substances as choline and inositol. There seem to be other factors entering into this relationship.

If we as internists drastically limit the cholesterol intake by the elimination of essential foods for body needs, we must face the possiblity of altering the body metabolism to such an extent that other metabolic diseases may occur.

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MEET OUR CONTRIBUTORS

Elmer R. Musick, M.D., F.A.C.P., Oklahoma City, has a paper on "Cholesterol and Arteriosclerosis" in this issue. Doctor Musick, whose specialty is internal medicine, was graduated from Northwestern University in 1922. He served his residency and internship at University Hospital, Oklahoma City.

Ben T. Gailbraith, D.M. and *Charles K. Holland, M.D.*, both of McAlester, are joint authors of "The Eisenmenger Complex with a Patent Ductus Arteriosus: A Case Report." Doctor Galbraith was graduated from the University of Tennessee in 1944. He interned at Denver General Hospital and took a two year residency in internal medicine at Kennedy V. A. Hospital, Memphis. He spent 24 months in the service and was a captain when released from service.

Doctor Holland, who also took his residency at Kennedy V. A. Hospital, was graduated from Vanderbilt in 1945. He interned at the University of Alabama Hospital. Doctor Holland was also a captain in the army and served 20 months overseas.

Henry S. Browne, M.D. wrote "Transurethral Prostatectomy" in the June Journal. Doctor Brown, who is certified by the Board of Urology, was graduated from Tulane in 1914 and interned at Charity Hospital, New Orleans. He is chief of staff of the urology section at St. John's Hospital, Tulsa.

A. I. Ortenburger, Ph.D. is professor of zoological sciences at the University of Oklahoma. His article on "Treatment of Snake Bite" is the second he has had published in the Journal of the Oklahoma State Medical Association as a prior article on snakes prevalent in Oklahoma.

E. E. Shircliff, M.D. and *Howard C. Hopps, M.D.*, both of Oklahoma City, have a Clinical Pathologic Conference in this issue of the Journal. Doctor Hopps is familiar to readers of the Journal as his articles have been appearing several times each year in the Journal. Doctor Hopps, who is chairman of the Department of Pathology and Professor at the University of Oklahoma School of Medicine, has been certified by the Board of Pathology. He was graduated from the University of Oklahoma in 1937 and interned at Evanston Hospital, Ill.

Doctor Shircliff was graduated from the University of Kansas in 1939 and interned at Santa Barbara General Hospital in California. He took a four year residency at the Regional Hospital, Camp Swift, Texas. Doctor Shircliff served 45 months in the army in World War II and was a major.

TREATMENT OF SNAKE BITE

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The people of Oklahoma are fortunate because most of our 60 species and subspecies of snakes are not only harmless but actually beneficial. There are only a few kinds of venomous snakes in the State. Of these, five are without doubt dangerously poisonous and six others, being smaller, are less to be feared.

Anyone who hikes, climbs, fishes or camps should know our poisonous snakes. There are seven forms of rattlesnakes found in Oklahoma. Four are large enough to be very dangerous while the other three, the massasaugas, are small snakes (Fig. 1). The most dangerous form in Oklahoma is the only too common diamond-back rattlesnake (Figs. 2, 10). The timber rattlesnake (Figs. 8, 9), the canebrake rattlesnake, and the prairie rattlesnake (Figs. 3, 11) may also reach formidable size. The other poisonous snakes in Oklahoma are the cottonmouth moccasin, which if large is also quite dangerous, and the copperhead (3 subspecies) (Fig. 4).

All our poisonous snakes are pit vipers,[1] so-called because of a noticeable pit located on either side of the head between the external nasal opening and the eye (Figs. 1, 2, 3, 4, 5, 8). This pit has been shown to be thermo-sensitive. None of our harmless snakes have this pit (Fig. 7). The venom produced by these pit vipers is largely hemolytic and endotheliolytic in action.

It should be easy to identify any of our rattlesnakes because they possess the well known rattle or at least a button on the end of the tail (Fig. 6). The cottonmouth moccasin (Fig. 5) is commonly confused with any of our several harmless water snakes or as they are often called water moccasins. The only easy way to tell the difference between the poisonous cottonmouth moccasin and the ordinary water snakes is to see if the pit is present or not; if there is a pit the snake is the cottonmouth. Copperheads (Fig. 4) are also frequently confused with harmless snakes. The copperhead, like our other poisonous snakes, also has the pit, and in addition a bright reddish or copper-colored head. Statistically the copperhead is the least dangerous of all our poisonous snakes, size for size; of 1089 cases of copperhead bites reported for two years there were no fatalities. Incidentally, in spite of very common stories to the contrary, there are no poisonous lizards in the State.

One of the difficulties the medical man encounters when a snake bite victim is brought to him for treatment is that the person usually has no idea what kind of snake bit him. The situation is often rendered difficult by the patient being hysterical. He may feel certain that it was a poisonous snake that bit him and will imagine anything to prove his point. One can only go on the assumption that it was a poisonous form because to delay treatment would be very unfortunate.

If the bite was that of a poisonous snake there will have been distinct burning pain felt from the time of the bite. Even this in many instances is difficult to assess but other signs soon appear. The "pain" from the bite of a harmless snake is no more than that caused by scratching the skin with several needles. If a poisonous snake has been responsible for the bite, reddening and swelling become apparent around the site of the wound within five to 10 minutes. It is often thought that if the bite is that of a poisonous snake there will always be two clean easily seen puncture wounds made by the fangs. This is not always the case as the victum may jerk away and thus there will be a certain amount of tearing of the skin by the numerous teeth as well as by the fangs.

It is well to remember that no snake-bite victim has ever died as the result of overtreatment of the proper sort. The usual home "remedies" are quite worthless or worse even though some of them have ardent supporters. Known recoveries of individuals treated with such useless remedies can easily be explained, as most people will recover from a venomous bite even if nothing is done; further, many bites supposedly of poisonous snakes are actually those of harmless ones. Drinking of whiskey or other alcoholic beverages and the application of such substances as potassium permanganate to

[1] There is a real possibility, however, that the coral snake will be found in extreme southeastern Oklahoma. It is a dangerously poisonous form of another group with a neurotoxic type of venom. There are numerous reports of its presence in the State but these are unverified. It is easily confused with two or three of our harmless snakes.

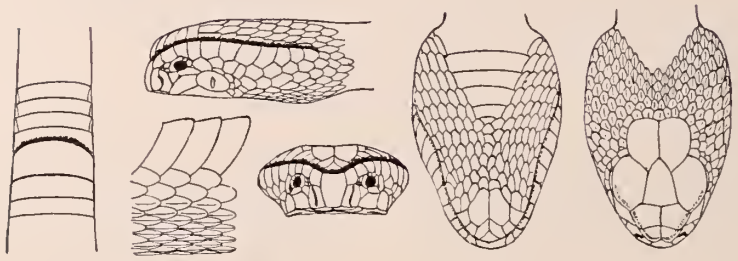


FIG. 1. Massasauga. (From Cope). x 1.

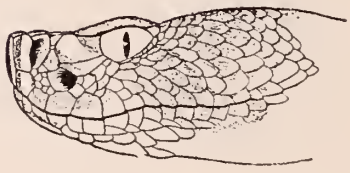


FIG. 2. Pit on side of head of Diamond-Back Rattlesnake. (From Stejneger). x 1.

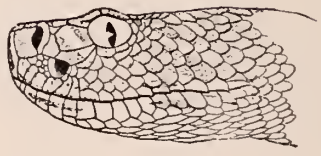


FIG. 3. Pit on side of head of Prairie Rattlesnake. (From Stejneger). x 1.



FIG. 4. Copperhead. (From Stejneger). x 1.

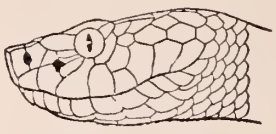


FIG. 5. Cottonmouth Moccasin. (From Stejneger). x 1.

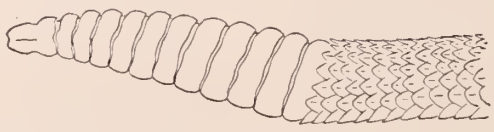


FIG. 6. Rattle of Rattlesnake. (From Stejneger after Garman). x 1.

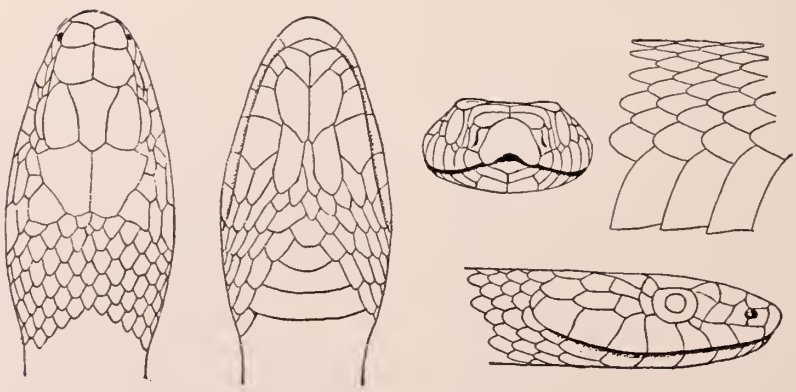


FIG. 7. Blue Racer. (From Cope). x 1.

the wound are strictly to be avoided. Proper treatment may be divided into three steps.

1. *The use of the tourniquet.* Whenever possible a tourniquet should be applied immediately a couple of inches above the site of the bite, that is, between it and the heart; (40 per cent of all bites are on the arm or leg). It has been shown conclusively that unless the fang happens to enter a blood vessel most of the toxin from a snake bite travels by way of the superficial lymphatics and veins; hence the tourniquet should be only tight enough to restrict the flow of lymph or blood in the superficial vessels.

2. *Incision.* Cross- or "T"-shaped incisions should be made through the site of the bite or the fang punctures if they can be seen. The physician will have to use his judgment as to the depth of these incisions. They should be made as deep as the fangs have penetrated, perhaps 6 mm. to 9 mm. if the snake was of medium size, for example a copperhead. They should be correspondingly deeper in the case of a bite from a large snake like a large timber or diamond-back rattlesnake. Obviously such incisions should be made so as not to sever any large blood vessels, nerves, or tendons or to cut through the periosteum.

3. *Suction.* Negative pressure or suction should be applied to the wounds. It is essential to begin this as soon as possible. Speed is of the utmost importance in applying the tourniquet, in making the incisions and in beginning suction, in this order. The more venom that can be removed before it has a chance to enter the general circulation, the more favorable will be the prognosis. Jackson and others have shown that the suction treatment is very effective. If no suction device is available, good results may be obtained by the use of the mouth, and this is a safe procedure if the individual sucking the wound has no break in the oral mucosa. The venom can be swallowed with impunity, if, again, there is no break in the mucosa of the alimentary tract. If swallowed the venom is digested without any harm. Snakebite kits are available at many drug stores and are very much more effective than the mouth for suction. If at all possible such a kit should be obtained at the earliest moment and used. Suction should be continued for a considerable period of time. One good method is to apply suction for five to 10 minutes, then loosen the tourniquet for a few seconds, then tighten the tourniquet and continue to repeat this procedure. In serious cases of snake-bite poisoning it is highly advisable to continue suction as outlined above for as long as 10, 15, or 20 hours.

4. *Later treatment.* Swelling will probably progress proximally along the arm, if the wound, for example, is on this extremity. In such case the tourniquet should be moved along the arm towards the body and kept in a position just proximal to the swollen portion. Remember to keep the tourniquet tight enough to retard the flow of blood and lymph only in the superficial vessels. Harm may result if the tourniquet is too tight. It should be loose enough to admit one or two fingers quite easily.

Because of the fact that anything which increases the rate of blood flow will of necessity increase the rate of distribution of any venom that is getting into the blood stream, it is highly important to keep the patient as quiet physically and as calm as possible. The treatment will vary of course with the individual. Ordinarily sedation by the use of one of the more rapidly acting barbiturates is indicated. Many individuals can be given some real confidence if they can be convinced that the death rate from the bite of our poisonous snakes is low even without *any* treatment and that with the proper surgical treatment the death rate is very low (1.5 per cent to 2 per cent). It is certainly obvious that the use of stimulants is to be avoided.

As swelling progresses it is advisable to make numerous shallow incisions through the skin of the swollen area distal to the tourniquet. The use of a local anesthetic before making the incisions is not contraindicated and some believe this actually helps in reducing the absorption of the venom. Apply suction to these incisions also. Thus venom still present in any particular region will ooze out along with the blood and lymph; all venom that can be removed in any way whether by suction or further incisions and suction cannot enter the circulation to do further damage.

One of the properties of pit-viper venom is that it not only destroys large quantities of red blood corpuscles but at the same time breaks down the endothelium of the smaller blood vessels. The resulting extravasation produces a very noticeable discoloration of the region affected. Other clinical symptoms such as weakness, dizziness, profuse sweating, and nausea may become manifest, and may be treated symptomatically. Particular care should be taken for as long as some

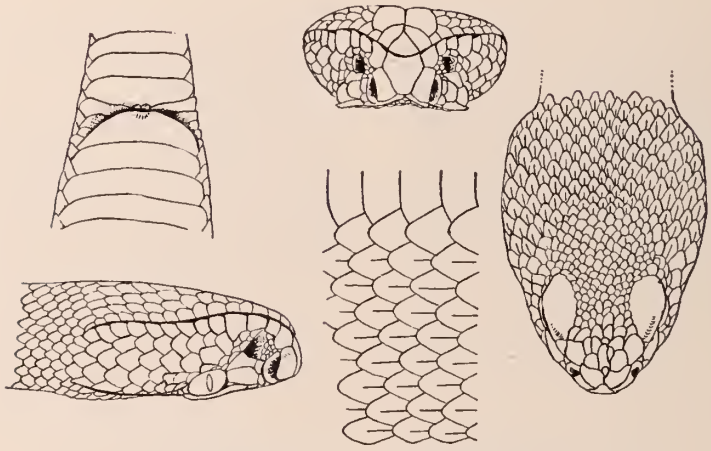


FIG. 8. Timber Rattlesnake. (From Cope). x 1.

weeks to watch for the development of secondary infections. The venom seems to destroy the natural bactericidal action of normal blood to some extent.

No paper concerning the treatment of poisonous snake bites would be complete without the mention of the use of nearctic Crotalidae polyvalent antivenin. The use of antivenin has by no means proved completely effective. Under certain conditions its use may be indicated. It may be advisable if the patient is a small child or an elderly person in poor physical condition, or in other serious cases. It is not to be inferred that antivenin is useless. There are, however, certain important considerations to be kept in mind. First, five ampoules, a total of from 50 cc. to 75 cc. of the antivenin should be injected. A smaller amount is of little value in most cases. The injections should be intramuscular directly into the bite area and also proximal to this area. Small children require proportionately more than adults because a certain amount of venom injected by the snake will actually be a larger amount relative to the blood volume than it would be in the adult. Also, the larger the snake, the better is the chance that a larger amount of venom will have been injected and hence more antivenin may then be necessary. Second, the use of such quantities of antivenin is not without danger to the patient, particularly because of of the likelihood of severe anaphylactic shock. On the other hand, the treatment with antivenin apparently is helpful in very severe or critical cases even if not used until many hours after the individual has been bitten. The physician must use his judgment in such cases.

In case of doubt concerning the individual's condition, *whole* blood transfusion is strongly advised, first, because of the hemolytic effect of the venom itself, second, because of the loss of blood resulting from the perhaps very numerous incisions made, and third, because of extravasation resulting from the partial destruction of the smaller blood vessels. In this connection it is well to keep in mind that if any large quantity of the toxin enters the general circulation there may be severe hemorrhage from abdominal and other vessels.

Summary: *1.* Unless the patient is hysterical it should be easy to determine within a few minutes whether or not the snake that delivered the bite was a poisonous one. If it was poisonous there is a severe burning pain at the site of the bite almost immediately or within a very few minutes. Within a few more minutes there will be swelling and discoloration in the area and a feeling of general malaise. *2.* The services of a competent physician should be obtained at the earliest possible moment, and in the meantime the victim should do nothing to increase the rate of circulation. *3.* A loose tourniquet should be applied as soon as possible above the site of the bite. *4.* Cruciate incisions should then be made at the site of the bite. *5.* Suction should be begun at once using the mouth if no suction apparatus is available. It is better to continue intermittent suction too long than not long enough. *6.* Whiskey and other alcoholic drinks are strongly contraindicated. *7.* As swelling progresses towards the heart from the site of the bite the tourniquet should be kept above the swollen area. *8.* Many more shallow incisions should be made through the skin of this swollen area and suction applied to these incisions. *9.* Over-treatment or over-hospitalization is

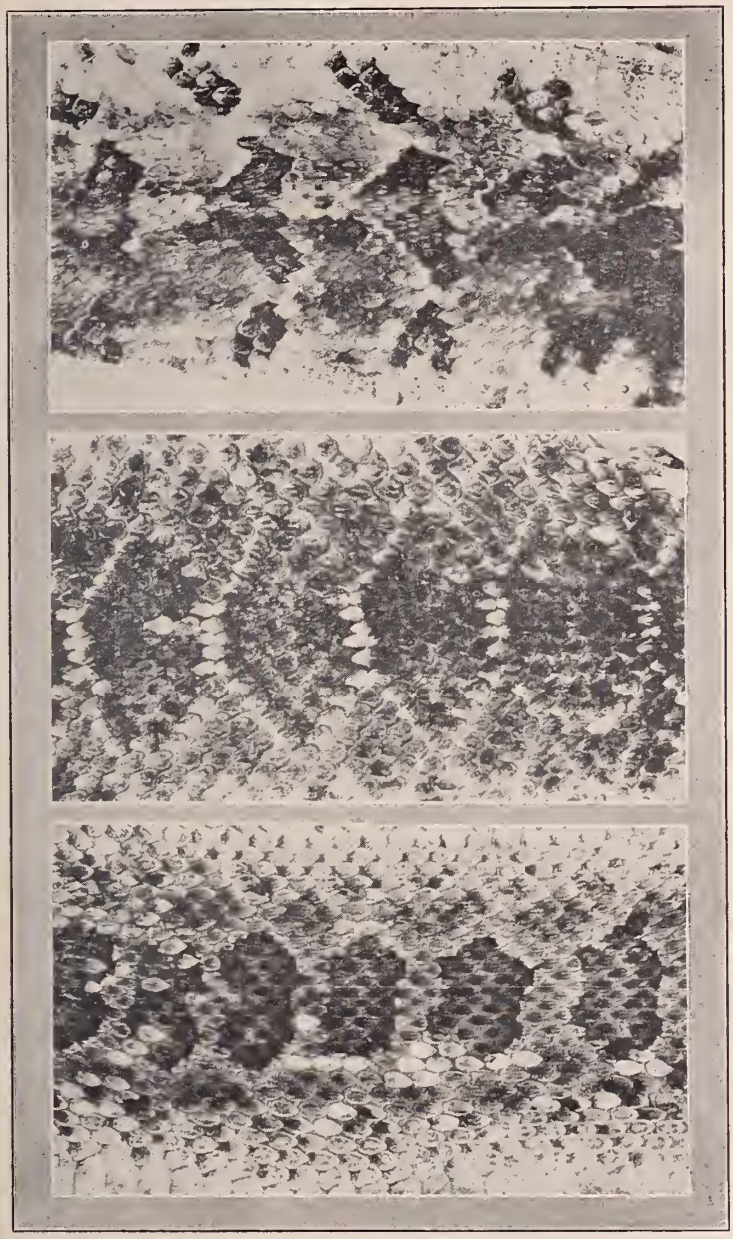


FIG. 9. Dorsal Pattern of Timber Rattlesnake, x 5/8.

FIG. 10. Dorsal Pattern of Diamondback Rattlesnake, x 1/2.

FIG. 11. Dorsal Pattern of Prairie Rattlesnake, x 3/4.

quite unlikely. *10.* The use of sedatives is advised in those cases where it seems at all necessary to keep the patient calm and quiet. *11.* The use of antivenin is advised when in the judgment of the physician its probable advantages outweigh the objections. *12.* Transfusion of whole blood is advised in serious cases, or whether doubt exists about the patient's satisfactory progress. *13.* The danger of later infection must be kept in mind for some weeks following recovery.

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TRANSURETHRAL PROSTATECTOMY*

Reporting 252 Consecutive Cases Without A Death

HENRY S. BROWNE, M.D.

TULSA, OKLAHOMA

When prostatic resection first came into use, we all thought it was a distinct advance over the previous methods in that we now had visualization and could see what we were cutting. As we became more proficient in the use of the resectoscope, we removed more and more tissue until we finally realized we were doing a transurethral prostatectomy. Although I have been doing that for many years, I have been diffident in using the term until recently when a case in which 63 gms. of tissue had been removed 18 months previously, died and came to autopsy. With reference to the prostate Doctor Lowbeer stated "There is an almost complete defect of the prostate but the defect is covered with mucosa. Only small lobular remnants of the prostate can be found to protrude slightly into the lumen."

About 80 per cent of all prostatic obstruction is caused by the benign hyperplastic gland. This originates from the small glands just beneath the mucous membrane of the porterior urethra, which, as they grow larger compress and thin out the true prostate, which then forms the so called capsule, so that a prostatectomy really means the removal of the adenomatous tissue, while the prostate is left behind. Some divide the glands into those small enough to resect and those too large to resect. I could never see the difference, feeling that in the larger glands, simply more tissue had to be removed to get the desired result. Transurethral resection, as has been said many times, is a marvelous operation and when done properly, the patient will void a full, free stream and empty his bladder, which is what nature intended. As the gland has been entirely removed, there is no more chance of recurrence than in any other type of operation. At the present time, better than 98 per cent of my cases are resected.

Many of these old men have cardiovascular disease and other degenerative changes so that many are very poor risks. These are gotten into as good condition as possible and then operated on and it is amazing that there is rarely any untoward reaction following surgery. The majority receive no preliminary drainage, but if the NPN is elevated, there is severe nocturia, marked residual urine or badly infected urine, continuous catheter drainage is carried out. Blood counts and NPN are taken and the prothrombin time estimated. Vitamin K is given routinely and fluids forced. A tonic is given and small doses of gantrisin. The prothrombin time is brought up to 100 per cent, if possible. If there has been recent cardiac failure, compensation should be established for at least a month. The patient should feel good, eat well and have a good urine output before surgery, but a certain number improve up to a point and then remain stationary. There is then no choice but to operate, because they cannot go on as they are and there is so little shock to the operation that they are rarely disturbed by it. Transfusions are given liberally both before and after the operation and I consider this the most important thing in bringing these patients thru successfully, besides doing the resection properly. Three grains of nembutal are given two hours before surgery and 100 mgm. of novocain spinal anesthesia is used. Bilateral vasectomy is done only in the debilitated and those over 70. The main dangers of the operation are (1) cutting into the rectum (2) cutting thru the bladder (3) hemorrhage (4) incontinence (5) the removal of an insufficient amount of tissue. All of these can be reduced to a minimum by following the proper procedure. (1). By removing the median lobe first, the floor of the prostatic cavity is outlined so that there is then no danger of cutting into the rectum. Resection is not carried any deeper than the level of the bladder. (2). One lateral lobe is then undermined from the bladder back to the verumontanum. In this process, one of the main arteries is cut and the dissection carried down to the circular parallel fibres of the bladder muscle before the artery is fulgurated. This will take care of most of the bleeding from that lobe. The intravesical part of this lobe is then removed flush with the bladder neck which is thus outlined, and the

*Presented before the monthly meeting of St. John's Hospital, Tulsa, Oklahoma, October 15, 1951.

danger of cutting thru the bladder on that side is then past. The lobe is then overmined which leaves a large piece of prostate sticking out into the urethra, where it can be removed rapidly and safely. The same procedure is carried out with the other lateral lobe. (3). Hemorrhage is kept to a minimum by removing one lobe at a time and sparking the bleeding of each at the end. By fulgurating the main artery first, as described above, before removing a lateral lobe, bleeding is greatly reduced, and finally the entire operated area is thoroughly searched for small bleeders before the catheter is put in and the patient returned to his room. The time to stop bleeding is on the operating table. Transfusions are given without hesitation even in cases of moderate blood loss. (4). The external sphincter lies just outside the verumontanum and all of the hypertrophied tissue is beyond the veru. Therefore, if the veru is intact at the end of the operation, the sphincter is intact and there will be no incontinence. (5). If an insufficient amount of tissue is removed, the patient is far worse than he was before, because the capsule has been opened and the blood supply cut off, so that the remaining tissue is devitalized, sloughing and infected, which leads to dysuria, frequency, difficulty and intermittent bleeding. The answer, of course, is to go back and do a complete transurethral prostatectomy, or if discouraged at these results, to remove the gland by an open operation. At the completion of the operation, a 24F bag catheter is placed in the bladder.

I have figured out four simple cystoscopic rules for a successful resection, which, if carried out, will result in the complete removal of all the obstructing tissue and, therefore, a transurethral prostatectomy. These rules have met with general acceptance. Following the operation 1000cc of five per cent dextrose is given twice the first day. Sedatives are given as necessary and the legs are flexed frequently to combat phlebo-thrombosis. The catheter is not irrigated unless it becomes stopped up. Gantrisin is continued and the patient is allowed up on the second day and in the average case, the catheter is removed on the fourth day and he is discharged on the sixth day. Most patients have no pain or discomfort at any time. When the catheter is removed, he should void a full, free stream the first time and be proud of it. The residual urine will be less than 50 cc's. If there is difficulty, straining, frequency or pain, it means that some tissue has been overlooked and the patient should be returned to surgery and this tissue removed. I do not let a patient leave the hospital until he is satisfied with his ability to urinate, for otherwise, he will be a walking poor advertisement. If he does not void freely from the beginning, he will not do so later on.

As for complications, post operative hemorrhage is disagreeable but not serious if the clots are washed out and bleeding points fulgurated promptly. Do not let a patient get exsanguinated, waiting and hoping the bleeding will stop of itself. Postoperative chills and high fever rarely occur since irrigation has been stopped and with the routine use of sulfa drugs and antibiotics. Following the operation, the urine remains cloudy with pus for some time as it takes four to six weeks for the prostatic cavity to heal. Gantrisin or mandelamaine is then given for three rounds on alternate weeks, at the end of which time, the urine is nearly always clear and free of pus. A 24F sound is passed and a possible early stricture avoided. The majority of these patients have been cystoscoped several months after operation and the concave cavity left after resection is shrunken down but permanent. There is an unobstructed view of the bladder from the veru, so instead of a prostatic urethra, there is a wide open cavity which is continuous with the bladder.

The control of urination is entirely dependent on the external sphincter. By following the above brief outline of management, from May 24, 1949 to June 13, 1951, I operated on 252 consecutive cases, doing 265 resections, without a death. Two were over 90, 28 more than 80 and 42 per cent more than 70. During that time, two suprapubic and two retropubic operations were done. In 46 per cent of the cases, less than 25 grams of tissue was removed. These are the cases that every one agrees resection is the operation of choice. Yet the four cases operated on three times and all but two of these operated on twice, had a total of less than 25 grams removed. So in my hands there is much less trouble with the larger glands than with the small ones. Up to 50 grams were removed in 49 cases, up to 75 grams in 37 cases, and more than 75 grams in 35 cases. In 14 more than 100 grams were removed, the largest amount being 148 grams. In the large glands, tissue can be removed rapidly, 110 grams having been removed in 40 minutes, and 23 pieces of tissue in 45 seconds. It is the trimming up

and finding of bleeders that takes time. There were 29 cases of carcinoma in this series. Post-operation strictures were seven and cleared up with the passage of sounds. Five cases of epididymitis, and one periurethral abscess occurred. Four patients had post-operative hemorrhage severe enough to return to surgery for fulguration. There were no cases of incontinence, though a few were quick on the trigger for several weeks. There were only two cases of phlebothrombosis and none of pulmonary embolism. Twelve had had previous resection from three to 13 years previously and two were operated on for contracted bladder neck following an open operation.

In conclusion, I wish to emphasize that a resection properly done is a transurethral prostatectomy and the results are excellent and permanent in the great majority of cases. The mortality is definitely less than in the open types of surgery and the sexual powers are not disturbed. It is a difficult, delicate operation and at times quite tedious but it is a great satisfaction to operate with little shock or discomfort on a man of advanced age representing a grave surgical risk and witness an uneventful convalescence and several years of comfortable living afterward.

CLINICAL PATHOLOGIC CONFERENCE

The University of Oklahoma School of Medicine

Presented by the Departments of Pathology and Medicine

HOWARD C. HOPPS, M.D. AND E. E. SHIRCLIFF, M.D.

OKLAHOMA CITY, OKLAHOMA

DR. HOPPS: This interesting diagnostic problem will be discussed by Doctor Shircliff. The information upon which he bases his clinical analysis is exactly similar to that which has been furnished to you in mimeographed form.

PROTOCOL

Patient: J.A.P., 54 year colored male. Died on his tenth hospital day.

Chief Complaints: Progressive abdominal enlargement (four months); mid-abdominal pain (two weeks).

Present Illness: The patient stated that he had been in good health until four months before, at which time he noticed that his trousers began to fit more tightly than formerly. From this time on his abdomen began to protrude more and more and he thought there might be some fluid in it. There was no change in bowel habits. He thought that his urine had become increasingly darker during the past few months. There was no change in amount, nor was there frequency, urgency, etc. He stated that he had never had jaundice nor had he had chills, fever or pleurisy. He denied having received injections of any sort within the past months, nor had he received intravenous transfusions. The patient stated he had lost 10-15 lbs. shortly before admission to the hospital. The attending physician questioned this statement in view of the obvious marked ascites and the fact that the patient did not appear malnourished. The patient stated that he had had hemorrhoids for several years with occasional bleeding. One week before admission to the hospital he passed one or two cups of bright red blood with stool. This was the first and only episode of this type. In the few weeks just before admission the patient stated that he had pain (character and amount not stated) in the midline of his abdomen. There had been some shortness of breath with the present illness but no pedal edema or other signs of congestive failure. The patient denied hemoptysis or hematemesis.

Past History: Essentially negative. The patient had no previous hospitalizations or serious illness; he denied venereal disease. There was no known exposure to toxic substances or occupational hazard (patient worked as a hotel porter for the past 13 years).

Family History: Of 10 brothers and sisters, nine were living. Mother died at 34 of pneumonia; father at 67 of "old age."

Physical Examination: On admission temperature was 98.6°F.; P. 86/min.; R. 20/min.; BP 120/86. The patient appeared acutely and chronically ill with marked abdominal distention and moderate shortness of breath. His head and neck were not remarkable. Pupils were round and equal and

reacted to light and accommodation. Fundi showed increased tortuosity of vessels. There was poor oral hygiene and gums were tender, soft, and bled easily. The skin was stated to be "negative." There was no lymphadenopathy. The chest was symmetrical. There were decreased areas of resonance in both lung bases posteriorly. The heart was not enlarged. Its rhythm was regular and there were no murmurs. There was marked abdominal distention with a readily demonstrable fluid wave. Genitalia were not remarkable. Extremities were "negative." Rectal examination revealed thrombosed external hemorrhoids and marked rectal tenderness. The prostate was enlarged (grade II). There were no abnormal masses palpable. No blood was encountered.

Laboratory Data: Urinalysis revealed sp. gr. 1.021, pH 6.0. There were 8-12 WBC's with small clumps. There were no RBC's, nor was there protein or sugar. A week before (OPD) urinalysis was essentially similar. RBC's were 3.26 and Hb. 10 gm. per cent, WBC's 8,050 with 63 per cent polymorphonuclears (2 stabs), 34 lymphocytes. Bromsulphalein test revealed 46.2 per cent retention at 45 minutes. Cephalin flocculation was 3+ (5 days later 1+). Thymol turbidity 10.43 units (five days later 6.39 units). Gamma globulin 2.7 gm. per cent (five days later 1.1); Van den Bergh—total 0.93; 1′, dir. 0.24 (five days later 2.25 and 0.45 respectively). Total protein 4.2/4.00 (five days later 5.1/3.16). Serologic tests on two occasions were as follows: Mazzini 2+ and 1+; Wassermann neg. and neg. V.D.R.L. wk. pos., and pos.; quan. V.D.R.L. neg. and q.n.s. Ascitic fluid exhibited the following proportion of cells: RBC's 81—lymphocytes 45 and polys 27; protein was one per cent and sp. gr. less than 1.016. The fluid was sterile. Stool examination on the second and third hospital days revealed 4+ and 3+ blood.

X-rays (two days before death) were as follows: *Chest:* Revealed no abnormality of the heart. Both costophrenic angles were clear. There was slight elevation of the right diaphragm. No evidence of pulmonary disease was seen. *Barium enema* revealed no intrinsic pathology of the colon. Several loops of dilated small intestine were seen. *Upper GI series* revealed no definite intrinsic lesions of the esophagus, stomach or duodenum, although suggestive filling defects in the lower third of esophagus strongly suggested varices. "Large epigastric mass irons out the lesser curvature of the stomach and measures approximately 7 x 10 cm. and seems to be continuous with the liver." After three hours there was approximately 80 per cent gastric retention and a small amount of gas was seen in the small bowel. Impression was: "Probable esophageal varices and epigastric mass which is extrinsic to the GI tract and probably involves the middle lobe of the liver."

Clinical Course: On the second hospital day five liters of clear straw-colored ascitic fluid were removed and the patient became much more comfortable. Now, an examination of the abdomen revealed an epigastric mass approximately 12 to 15 cm. in diameter which was quite firm. During the first seven hospital days the patient lost 19 lbs. His condition was stated to be essentially unchanged except for marked abdominal soreness from hiccups. On the tenth hospital day it was stated, for the first time, that the patient was markedly lethargic and having difficulty in breathing—he died on this day. There is no description of respiration, pulse, etc., just before death. The patient was afebrile throughout the hospital course.

CLINICAL DIAGNOSIS

DOCTOR SHIRCLIFF: We must account for the following things in this patient's progressive illness that resulted in death after approximately four months—1) development of ascites without ankle edema or heart failure, 2) epigastric pain of unknown character, 3) a large firm epigastric mass, and 4) gastrointestinal bleeding. The laboratory work indicates that there was non-specific involvement of the liver, but gives little specific information concerning the liver.

The lack of fever, with the laboratory findings, indicates that there was probably no acute infectious process involved. We have here equivocal tests for syphilis, which equivocation is aggravated by the fact that any hepatic disease may produce a falsely positive test for syphilis. The x-rays give us two other things to consider—a large mass, extrinsic to the colon, probably involving the liver and esophageal varices.

The patient's first evidence of illness was the progressive development of ascites without ankle edema. In such development one considers Pick's disease or chronic constrictive pericarditis (assuming that they are not the same disease), tricuspid insufficiency and portal venous obstruction. The first three are easily eliminated because they don't produce a tumor and there was described a definite tumor in the epigastrium. Portal obstruction may be of several origins.

It may be a result of portal cirrhosis. Seldom is a tumor of this size produced in portal cirrhosis. Carcinoma of the liver occurs in portal cirrhosis in approximately four per cent of the cases. Portal cirrhosis may exist for years without any signs or symptoms, and portal obstruction with development of ascites is very common in portal cirrhosis. These things fit together fairly well and *cirrhosis of the liver with primary carcinoma* is a very distinct possibility. Two other conditions we can't eliminate but which seem to be unlikely are: *abscess of the liver,* of amoebic origin, and echinococcal cyst of the liver. This latter is rare and on that basis alone is very unlikely. Amoebic abscess seems unlikely too, in the absence of signs of acute inflammation. The tumor which has been described may not be associated with the liver and if not we have been grossly misled.

Turning to still another diagnosis, it is my opinion that the primary cause of death in this patient was *syphilis.* I believe that after the usual latent period there developed gummata and diffuse hepatic interstitial fibrosis with deformity and tumor of the liver, that tumor being felt and described as recorded in the protocol. The rapid downhill course was probably the result of portal obstruction and was probably aggravated by portal thrombosis. Two conditions that we can not rule out are 1) *portal cirrhosis with development of primary malignancy* of the liver and 2) *metastatic tumor in the liver with slowly developing thrombosis of the portal vein.*

ANATOMIC DIAGNOSIS

DR. HOPPS: At autopsy, external examination revealed little except for moderate icterus of sclerae and other mucous membranes. The peritoneal cavity contained only several milliliters of light yellow clear fluid. The liver margin extended two cm. below the costal margin in the right midclavicular line. Its surface was nodular and these nodules were hemispherical and up to one cm. in diameter. The spleen did not extend below the costal margin, but it felt slightly enlarged. Other abdominal viscera were not remarkable. It is interesting that the foramen of Winslow was closed and this illustrates one mechanism which may be responsible for that change, namely, chronic ascites. The diaphragm was at the level of the fourth rib on the left and the level of the fifth rib on the right. Pleural cavities were not remarkable except for filmy fibrous adhesions posteriorly over the lower half of the left lung and, focally, over the base of the right lung. The pericardial cavity was essentially normal. The thoracic viscera were not remarkable except for moderate edema of the lung. There was no induration or other change to suggest an inflammatory or neoplastic process here.

The liver weighed 2100 gm. Extrahepatic bile ducts were examined carefully as was the portal vein and its tributaries. No significant abnormality was apparent. However, when intrahepatic branches of the portal vein were explored within the substance of the liver, the left main branch was found to be partially obstructed by a semi-necrotic mass which appeared to be tumor. The right branch of the portal vein was entirely obstructed by similar tissue. External surfaces of the liver exhibited coarse reddish mottling against a pale tan background and there was diffuse nodularity up to one cm. in diameter. Some of the nodules were soft, others firm. Cut surfaces of the liver presented numerous pale gray nodules measuring approximately five mm. in diameter. As on the capsular surface, some of these were soft and presented an appearance quite different from the usual firm yellowish or tawny nodules characteristic of Laennec's cirrhosis. However, many nodules did present this characteristic firmness and color and, furthermore, there was evidence of perilobular fibrosis—characteristic of cirrhosis. The gallbladder contained approximately 10 cc. of very dark green bile. The gallbladder was not remarkable except for a thin creamy white plaque of rather dense tissue over the medial aspect of the free surface. This was six x one cm. in area and averaged 0.2 cm. in thickness. The pancreas was not remarkable.

Examination of the gastrointestinal tract revealed numerous varicosities in the lower one-third of the esophagus which, at the time of autopsy, were collapsed. No point of hemorrhage was evident. There was marked leukoplakia over the lower third of the esophagus. The stomach contained 300 to 400 cc. of dark reddish brown material, apparently recently exuded blood. The remainder of the stomach and intestinal tract was not remarkable. The kidneys exhibited slight cholemic nephrosis.

Microscopic studies of the liver were most interesting and revealed marked multilobular type of cirrhosis (Laennec's) which was quite active at this stage. However, in most areas there were malignant neoplastic cells arising from hepatic cords invading

and surrounding the non-neoplastic parenchyma and infiltrating veins and lymphatics. The neoplasm appeared to be multicentric in origin. Many neoplastic nodules exhibited central necrosis and in some instances there was necrosis of entire nodules. Non-neoplastic portions of the liver exhibited marked degenerative changes probably secondary to portal venous obstruction. These changes seem sufficient to explain death on the basis of hepatic failure. The plaque-like lesion described in the gallbladder proved to be metastasis from the liver. The spleen exhibited moderate passive congestion, in keeping with the portal hypertension evidenced by esophageal varicosities, ascites and the demonstrated obstruction to portal veins.

The final anatomic diagnosis was:

Laennec's cirrhosis, advanced, active

Hepatic cell carcinoma (multicentric) with extension into portal vein, completely occluding right major division, partially occluding the left major division, and with metastasis to the gallbladder

Icterus, hepatocellular

Esophageal varices, marked, with massive hemorrhage

Ascites, marked (recent paracentesis)

Passive congestion, marked, of spleen, with reticular hyperplasia, moderate

FITE NAMED TO MEDICAL BOARD; JAMES F. McMURRY, M.D., RESIGNS

Governor Johnston Murray has apointed W. P. Fite, M.D. of Muskogee to the Medical Board of Examiners to fill out the unexpired term of James F. McMurry, M.D. of Sentinel.

Doctor McMurry submitted his resignation to Governor Murray as he did not feel that he could continue to give the necessary time to the appointment.

Doctor Fite has previously been a member of the Board of Medical Examiners.

TO DEMO CONVENTION

R. H. Lynch, M.D. of Hollis has been selected as one of the Delegates to the Democratic National Convention from his district.

GUEST AT MEETINGS

Outgoing O.S.M.A. President L. Chester McHenry, M.D., Oklahoma City, was guest at the state conventions of both the Dental and Pharmaceutical Association when the groups held their annual meetings in Oklahoma City this spring.

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JAMES J. CALLAHAN, M.D., Prof. of Orthopedics, University of Loyola, Chicago.
JOHN MAXWELL CHAMBERLAIN, M.D., Associate Surgeon, Columbia Univ., New York City.
ARTHUR C. CURTIS, M.D., Prof. and Chairman, Dept. of Dermatology and Syphilology, University of Michigan.
WALTER A. FANSLER, M.D., Clinical Prof. of Surgery, Univ. of Minnesota.
GEORGE T. HARRELL, M.D., Prof. of Medicine and Head of Dept., Wake Forest College, The Bowman Gray School of Medicine, Winston Salem, N. C.
BERNARD J. HANLEY, M.D., Clinical Prof. of Obstetrics and Gynecology, Univ. of Southern Califarnia, Los Angeles.
CHEVALIER L. JACKSON, M.D., Hanorary Prof. of Laryngology and Broncho-esophagology, Temple Univ., Philadelphia.
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RUDOLPH H. KAMPMEIER, Assaciate Professor of Medicine, Vanderbilt University, Nashville, Tennessee.
DANIEL B. KIRBY, M.D., Prof. of Ophthalmology, New York University College of Medicine, New York City.
WILLIAIM B. KOUNTZ, M.D., Prof. of Gerontology, Washington University, St. Louis.
FRANCIS L. LEDERER, M.D., Professor and Head of Dept., of Otalaryngology, Univ. of Illinois, Chicago.
ALBERT N. LEMOINE, JR., M.D., Prof. of Ophthalmology, University of Kansas, Kansas City, Kans.
VICTOR F. MARSHALL, M.D., Associate Prof. of Clinical Surgery (Uralogy), Cornell University, New York City.
JOHN PARKS, M.D.,Professor of Obstetrics and Gynecology, George Washingtan University, Washington, D. C.
JOHN M. SHELDON, M.D., Associate Prof. of Medicine, University af Michigan; Executive Committee, American Academy of Allergy.
JAMES H. WALL, M.D., Associate Prof., Clinical Psychiatry, Cornell University, New York City.
C. STUART WELCH, M.D., Prof. of Surgery, Tufts Medical College, Boston.
HARRY M. WEBER, M.D., Associate Prof., Radiology Mayo Foundotian Graduate School; Chief of Section on Roentgenology, Mayo Clinic.

DANCE EMERALD ROOM SHAMROCK HOTEL, TUESDAY EVENING, JULY 22

INTERESTING AND INSTRUCTIVE SCIENTIFIC EXHIBITS, TECHNICAL EXHIBITS, MOTION PICTURES

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FOR FURTHER INFORMATION WRITE THE PROSTGRADUATE MEDICAL ASSEMBLY OF SOUTH TEXAS
229 Medical Arts Building, Houston, Texas

President's Page

As the curtain is rung down on another Annual Meeting of the Oklahoma State Medical Association, the stage is automatically set for another year of work—and there is plenty to do.

I accept my part of the job cheerfully because by predecessors have laid a fine and solid foundation on which to work and have given me most excellent council.

The function of our society has become increasingly complex as we have undertaken more and more activities. For this reason closer cooperation of our members and better coordination of our efforts are required to make the progress we all so earnestly desire.

We have heard charges, from some quarters, that much is wrong with the medical profession. We have winced at undeserved barbs and have blushed in shame when occasionally one of our members has let us down. But for each line on what is wrong, a book could be written on what is right. I am proud of the traditions, the accomplishments and the ideals of the profession which is unequalled in its service to all regardless of circumstances and which asks no favors except to be left alone by meddling politicians.

In a quarter of a century of active participation in the affairs of the Association I have never attended a meeting at any level where the theme was not in the interest of the patient. Our Committee on Public Relations needs to be enlarged. In the matter of public good will and appreciation there is no substitute for the individual physician who tries earnestly to discharge his full responsibility to his patient. To this end I hereby appoint each and every one of you on this committee.

If you have suggestions or criticisms we shall be happy to receive them.

Alfred R Sugg.

President

Clinical Results* with Banthine® Bromide

(Brand of Methantheline Bromide)

22 Published Reports Covering Treatment of 1443 Peptic Ulcer Patients with Banthine

Comprising the reports published in the literature to date which give specific facts and figures of the results of treatment

AUTHORS	No. of Patients	Chronic, Resistant to Other Therapy	TYPES OF ULCERS				RELIEF OF SYMPTOMS (Chiefly Pain)				Surgery or Complications[1]	Side Effects Requiring Discontinuance of Drug[2]	EVIDENCE OF HEALING			
			Duodenal	Jejunal	Stomal	Gastric	Good	Fair	Poor	No Report			Complete	Moderate	None	No Report
Grimson, Lyons, Reeves	100	100	93	7			80	11	4		5		47		19	29
Friedman	15	15	14			1	5		4	6[3]			2			13
Bechgaard, Nielsen, Bang, Gruelund, Tobiassen	26	26	21			5	16	4	6				8	6	12	
McHardy, Browne, Edwards, Marek, Ward	162		162				136	12	11		3	1	14	9	7	129
Segal, Friedman, Watson	34	34	34[4]				14	13			7	2	5		8	14
Brown, Collins	117	99	117				97	7	8		5	8	55	9	8	40
Asher	77		65		7	5	52	9	16			16		9	21	47
Rodriguez de la Vega, Reyes Diaz	5	4	5				4		1					3	2	
Winkelstein	116	116	102	8		6	102		14				53		18	45
Hall, Hornisher, Weeks	18	18	18				11		1	6[5]			18			
Maier, Merli	38	38	24			14[6]	27	7	4[7]				10	2	5	21
Meyer, Jarman	25	18	25				21		4							25
Poth, Fromm	37	37	37				33	3	1				33	3	1	
Plummer, Burke, Williams	41	41	41				36		5				38		3	
McDonough, O'Neil	104	100	104				63	10	31			11	4		11	89
Broders	60	60	58		1	1	35	19	6				10	1	49[8]	
Legerton, Texter, Ruffin	11		11				11									11
Holoubek, Holoubek, Langford	76	69	76				35	27	10		4	10	26		10	36
Ogborn	42		39	2		1	42[9]									42
Shaiken	48	48	48				33	10	3		2		33	10	3	
Johnston	145	145	145				143		2			2	143		2	
Rossett, Knox, Stephenson	146		141			5	146					4[10]	53			93
TOTALS	*1443*	*968*	*1380*	*17*	*8*	*38*	*1142*	*132*	*131*	*12*	*26*	*54*	*552*	*52*	*179*	*634*
PERCENTAGES		*67.8*	*95.6*	*1.2*	*0.6*	*2.6*	*81.3*	*9.4*	*9.3*			*3.7*	*70.5*	*6.6*	*22.9*	

1. Not included in tabulations.
2. Included in "Relief of Symptoms" as "Poor" and in "Evidence of Healing" as "None."
3. Four had no symptoms when Banthine therapy was begun.
4. Of which seven were penetrative lesions and five partially obstructive.
5. No symptoms were present in four.
6. Two with symptoms only; no demonstrable ulcer.
7. Three were psychopathic patients and one had a ventricular ulcer of the lesser curvature.
8. Roentgen findings after treatment period of two weeks; forty-seven had duodenal deformity.
9. All returned to work within a week.
10. In these four, after relief of symptoms, Banthine was discontinued because of urinary retention.

During the past two years, more than 200 references to Banthine therapy in peptic ulcer and other parasympathotonic conditions have appeared in medical literature. Of these reports, 22 have presented specific facts and figures on the results of treatment in a total of 1,443 peptic ulcer patients, 67.8 per cent of whom were reported as chronic or resistant to other therapy. These results are tabulated above and show:

"Good" relief of symptoms was obtained in 81.3 per cent of the 1,405 patients on whom reports were available.

"Complete" evidence of healing was obtained in 70.5 per cent of the 883 patients on whom reports were available.

In all but 9.7 per cent, relief of pain was "good" or "fair." In all but 22.9 per cent, evidence of healing was "complete" or "moderate."

During treatment, 26 patients required surgery or developed complications other than ulcer which required discontinuance of the drug before results could be evaluated.

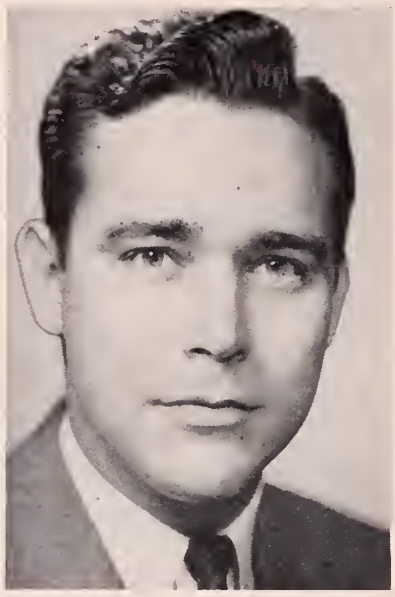
Of the remaining 1,417 patients, only 3.7 per cent experienced side effects sufficiently annoying to require discontinuance of the drug.

ACCEPTED Council on Pharmacy and Chemistry American Medical Association

*Volume containing complete references, with abstracts of 39 additional reports, will be furnished on request by

G. D. SEARLE & Co., P. O. Box 5110, Chicago 80, Illinois.

NEW FACULTY APPOINTMENTS AT THE SCHOOL OF MEDICINE



DORTOR WOLF

Stewart G. Wolf, Jr., M.D. has been appointed by the Regents of The University of Oklahoma as full-time Professor and Head of the Department of Medicine at the School of Medicine. Doctor Wolf comes here from Cornell University Medical College where he was Associate Professor of Medicine. During World War II he served as Captain and Major in the U. S. Army Medical Corps with the Ninth General Hospital in the Southern Pacific.

Doctor Wolfe was born in Baltimore, Maryland, in 1914, attended Phillips Academy, Andover, Yale University, and Johns Hopkins University and Medical School, receiving both his A.B. and M.D. from the latter. He had his internship and medical residencies at the New York Hospital, New York. He has also served as a Research Fellow at Bellevue Hospital, the New York Hospital, and at the Harvard Neurological Unit of Boston City Hospital. Doctor Wolf has membership in many scientific societies and associations, and has been the author or co-author of 79 articles published in scientific journals, has contributed material for five books, and has published four monographs. His research activities have included the fields of gastrointestinal physiology, neurology, cardiovascular diseases and diabetes. In 1943 Doctor Wolf was given the American Gastroenterological Association Award for Distinguished Research in Gastroenterology.

Appointed as Associate Professor of Medicine is Robert M. Bird, M.D., who is coming to assist Doctor Wolf in administering the Department of Medicine. Doctor Bird also comes from the Cornell University Medical College.

Doctor Bird was born in Charlottesville, Virginia, in 1915, attended Episcopal High School, Alexandria, and the University of Virginia and School of Medicine, receiving a B.S. in Medicine in 1937 and an M.D. in 1939. He interned and had a two year medical residency at the New York Hospital. After returning from four years service in the U. S. Army Medical Corps as 1st Lt. to Major with the Ninth General Hospital, he served both the departments of Medicine and Physiology at Cornell University Medical College as Instructor and Assistant Professor.

Doctor Bird is a diplomate of the American Board of Internal Medicine and has membership in other scientific societies and associations. Published articles in various Journals which he has authored or co-authored are primarily in the fields of hematology and fat metabolism.



DOCTOR BIRD

LONDON & LANCASHIRE CANCELS MALPRACTICE POLICY OF O.S.M.A.

Effective April 1, 1952, the London and Lancashire Indemnity Company of Hartford, Conn., cancelled the master policy held with the Association for the writing of malpractice insurance for its members.

Prior to the cancellation of the policy, the Insurance Committee of the Association made every effort to renegotiate the contract but without success.

The company gave no specific reasons for the cancellation of the contract, other than the statement that they were withdrawing from this field of insurance.

Physicians whose malpractice insurance was with the London and Lancashire will find it necessary to place this coverage with companies that are now writing it in the State of Oklahoma. Local insurance agencies have been advised of the cancellation of the contract by the London and Lancashire and should be in a position to place this coverage elsewhere.

The Insurance Committee of the Association is attempting to negotiate a new contract with another company and as soon as any negotiations are completed, a special announcement to the membership will be immediately made.

Over 985 members of the Association held contracts with the London and Lancashire.

Terramycin



CAPSULES



Rapidly absorbed following oral administration, Crystalline Terramycin Hydrochloride Capsules elicit prompt therapeutic response in acute and chronic infections involving a wide range of organs, systems and tissues. Its broad spectrum of antimicrobial activity encompasses organisms of the bacterial and rickettsial as well as certain spirochetal, viral and protozoan groups.

Supplied: 250 mg., bottles of 16 and 100;
100 mg., bottles of 25 and 100;
50 mg., bottles of 25 and 100.

Terramycin is also available as:

Elixir, Oral Drops, Intravenous,
Ophthalmic Ointment, Ophthalmic Solution.

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MESSAGE FRON THE DEAN, SCHOOL OF MEDICINE

MARK R. EVERETT, PH.D.

I am happy to turn this month's space over the Stewart G. Wolf, Jr., M.D., newly appointed Professor and Head of the Department of Medicine. We are fortuuate in having such a leader in medical educatiou join our Faculty. I feel that we shall all be stimulated by Doctor Wolf's coming to Oklahoma, and I am sure you will be interested in his forward looking ideas on medical education as expressed in the accompanying article.

THE NEXT STEP IN MEDICAL EDUCATION

STEWART WOLF, M.D.

Before consideriug the next step in medical education it is fitting to review the important steps in the past which have brought us to our present position, and to assess the need, if any, for change. Prior to 100 years ago a large body of fairly exact data coucerning the structure of man's body in its dead state had accumulated together with certain empiricisms useful in dealing with the symptoms of the sick. Students were taught in didactic lectures and they had scarcely any clinical experience duriug their school year.

Over the past 100 years, however, changes have taken place based on a painstaking collection of data pertaining to the function of various living organs aud organ systems in small animals and in man. These uewer developments ultimately led to the establishment of bedside teaching with iucreasing emphasis on laboratory procedures for diagnosis. The limited command which clinical teachers had of the rapidly growing knowledge of many of the sciences basic to medicine uecessitated the existence of separate "pre-clinical" departments for the teaching of medical students. Each one, charged with a part of the responsibility for educating the student, became a semi-autonomous organizatiou with jurisdiction over a certain number of hours in the student's day. The head of oue department could set up his own curriculum indepeudently of other departments.

More modern developments in medicine are out of keeping with this comparative isolation in teaching. Instead of further separating our categories of knowledge, the march of science has brought about a great deal of overlappiug and therefore a need for integration in teachiug. Nevertheless, our teaching in most medical schools is still highly departmentalized. At our present stage of development a medical student learns, for example, the structure and function of the heart from two separate professors. In some cases, there is a loose integration of the courses, but uo serious attempt to combine the knowledge available on the subject. This deficiency does not stem from divergent attitudes among the members of various departments, because nowadays the biological horizou of "pre-clinical" teachers is broad. For example, the interests of anatomists, as reflected by their publicatious, lie more with function than structure and hence are chiefly physiological. Pharmacologists are spending less time testing the action of chemical agents on isolated tissues. The tests for pharmacologic action and toxicity are being left largely to the drug houses, while the medical school department of pharmacology are publishing papers about tissue metabolism. So are the biochemists. Since the department members themselves are showing such breadth of biologic horizon, a strictly departmentalized approach to teaching seems all the more out of place.

Recent developments have also made the "great divide" between pre-clinical and clinical teaching less and less meaningful. Judging again by publications and also by observing teaching in the departments, it is clear that in many schools physiologists are making fewer and fewer animal preparations and instead are inclined to observe experiements of nature in the human preparation. By the same token clinicians are becomiug more "physiologically minded." They are less and less concerned with syndromes and more and more with mechanisms. Gynecologists 50 years ago published chiefly concerning new operative techniques aud maneuvers. They are now studying cytology, endocrinology and metabolism.

Psychiatrists, too, are applying their concepts to the study of the fuuctioning human organisms rather than restricting them to his psychological apparatus. Thus, it would appear that the departmentalized structure of the medical student's curriculum is more a matter of traditiou than conviction. Why does it persist?

Iu auy medical discipline or departmeut one finds two general lines of emphasis: (1) The devclopment of techniques and "tools of the trade" and the refinement of methods for the execution of a special task; and (2) The iutegration of the work of that discipline with others in the medical field, that is, the application of the data from specialized studies to the geueral problem of health and disease. Since each department is assigned a limited number of hours it is probably to be expected in our competitive society that the former should be emphasized at the expense of the latter.

The result of all this has beeu that the studeut's time and energies are consumed by demands of the various departments to memorize numerous easily available data so that there is little time for thought and inquiry into what medicine is all about. The branches of the brachial plexus aud the distributiou of cutaneous uerves are memorized and rememorized two or three times during medical school. Later they are forgotten. Important matters of cellular metabolism, on the other hand, are offered to the student among a welter of biochemical data in a couple of lectures in the first year before he can grasp what relevance a cell has to disease or to the functioning human organism. More time is speut in medical school on the techniques of ideutificatiou of parasitic worms in feces, a job which 90 per cent of doctors relegate to a technician or diagnostic laboratory, than on the technique of iuquiry into the early developmeut of family relationships of a patient with peptic ulcer, a job which only the physician can do and which will confout him almost daily in practice. We are asked as physicians to view the whole patient and yet our medical educatiou at present does not provide for the development and training of a whole doctor with sufficient depth of perspective to do the job.

The Uuiversity of Oklahoma School of Mediciue has been trying to meet this challenge, especially over the past four years under the able aud imaginative leadership of Dr. Mark R. Everett aud amid a vast prograau of expansion.

Already departmental barriers are being broken down toward a better perspective for the student. Nowadays, two or three departments may participate in a single teaching session. There are conferences in which the basic science teachers are brought together and in ward rounds their knowledge is brought to bear on live clinical problems. Diseases are being regarded no longer as organ disturbances, but as integrated patterns of defeuse on the part of the whole human organism against a threat to his integrity or welfare. The focus of teaching is now on the sick persou rather than just his disease.

With these and further modifications of concept and method it is hoped that we at Oklahoma may be among the first to take the next step in medical education.

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For greater clinical safety plus the advantages of more rapid absorption, better tissue distribution and faster therapeutic effect.

TRICOMBISUL Tablets, 0.5 Gm. total sulfonamides, each tablet containing 0.166 Gm. of sulfa*cetimide,* sulfadiazine and sulfamerazine.

TRICOMBISUL Liquid, 0.5 Gm. total sulfonamides (0.166 Gm. each of sulfa*cetimide* [solubilized], sulfadiazine and sulfamerazine) per teaspoonful (4 cc.).

*T.M.

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FIFTY YEAR PINS PRESENTED TO TWELVE PHYSICIANS





Left: George LaMotte, M.D.; John M. Alford, M.D.; Horace Reed, M.D.; Lewis J. Moorman, M.D. and A. J. Coley, M.D. Top: McLain Rogers, M.D. pins a 50 Year Pin on A. H. Bnngardt, M.D.

Seven Oklahoma City physicians, and one each from Castle, Edmond, Okmulgee, and Cordell and one now residing in California are now wearing the gold lapel pin signifying 50 years of service as a member of the Oklahoma medical profession.

In recent ceremonies sponsored by their county medical societies, the following were presented the pins denoting 50 years in the practice of medicine: R. M. Howard, M.D., Horace Reed, M.D., J. M. Alford, M.D., George A. Lamotte, M.D., A. J. Coley, M.D., Lewis J. Moorman, M.D., Everett S. Lain, M.D., all of Oklahoma City; J. W. Shelton, M.D., formerly of Oklahoma City and now Los Angeles, Calif.; A. H. Bungardt, M.D., Cordell; A. C. Lucas, M.D., Castle; S. B. Leslie, Sr., M.D., Okmulgee; and James I. Lyon, M.D., Edmond.

Doctor Bungardt's pin was presented to him when he was guest of honor at a Chamber of Commerce Banquet in Cordell. Presentation was made by McLain Rogers, M.D., pioneer Clinton physician and long time friend of Doctor Bungardt. Doctor Bnngardt was grad-nated in 1902 from the University of Missouri School of Medicine and has been practicing medicine in Cordell since he arrived there December 11, 1902, and purchased the practice from a former physician there for a $100 note.

Doctors Howard, Reed, Alford, LaMotte, Coley, Moorman, Lain and Lyon's pins were presented at the monthly buffet supper of the Oklahoma County Medical Society. Doctor Shelton, who moved to Los Angeles in 1948 after 50 years' practice in Oklahoma City, received the pin in absentia.

Of the Oklahoma County physicians, Doctor Lain recently received a gold medal and diploma by the American Cancer Society for his work in the field of research; Doctor Moorman, former Dean of the Medical School, is widely known in the field of tuberculosis and as the author of *Tuberculosis and 'Genius* and *Pioneer Doctor;* Doctor Coley, who is 94, remembers fighting epidemics with his intuition in place of modern public health methods; Doctor Howard, now retired, taught surgery at the University of Oklahoma and was once president of the American Goiter Association; Doctor Reed was associate on the teaching staff at Epworth University Medical School which later merged with the University of Oklahoma School of Medicine; Doctor Alford, another 50 Year Pin wearer who has not retired, says, "I want to take out someone's appendix today and go to heaven tomorrow"; Doctor Lamotte is professor emeritus of medicine at the School of Medicine; Doctor Lyon, who is 82 years old and practiced medicine almost 60 years before he retired, was formerly physician and health director for the Kickapoo and Pottamatomie Indians at McCloud.

O.S.M.A. President L. Chester McHenry, M.D. presented 50 Year pins to A. C. Lucas, M.D., Castle, and S. B. Leslie, Sr., M.D., Okmulgee, at a meeting of the Okmnlgee and Okfuskee County Medical Societies.

OKLAHOMA STUDENT A.M.A. REPRESENTED AT ANNUAL MEETING

For the first time in the history of the Oklahoma State Medical Association, representatives of the Student body at the University of Oklahoma School of Medicine participated in the deliberations of the House of Delegates.

William B. Stover and William F. Denny were the first delegates from the Student A.M.A. chapter to serve in this capacity. Local chapters have been established in practically all the approved schols of medicine in order to acquaint the students with the purposes of the county, state and American Medical Association.

INDIAN HOSPITAL MAY BE OPENED TO NON-INDIANS

A recent law enacted by Congress gives the Secretary of Interior the right to open Indian Department Hospitals for the care of non-Indians when the area served by the Indian Hospital may not otherwise have adequate hospital facilities.

The hospital rate to be charged by Indian hospitals is to be the average cost per patient day for the respective Indian hospital.

No effective date for the opening of Indian hospitals has been established and will depend upon an individual survey of each area served by an Indian hospital.



Scene from "Oliver Twist"



CHARLES DICKENS
1812-1870

Psychoneurotic Men of Genius

Charles Dickens, the renowned British novelist, was subject to cyclic moods of pronounced depression characterized by intense nervous irritability and by the shedding of tears all day long. He was exceedingly sensitive to his own experiences as well as to the suffering of others.

In the great majority of psychoneurotics, there is no serious mental illness, but merely an emotional imbalance which often can be greatly improved by proper psychotherapeutic and sedative management. In the treatment of psychoneurosis, particularly agitated, depressed and anxiety states, Mebaral is preferred by many because it combines a high degree of sedative effectiveness – producing emotional stability – with a relative freedom from side effects such as languor and drowsiness. Patients usually become calmer, more cheerful and better adjusted to their surroundings without clouding of mental faculties.

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Average sedative dose:
Adults, 32 mg. to 0.1 Gm. (½ to 1½ grains) three or four times daily;
children, 16 to 32 mg. (¼ to ½ grain) three or four times daily.

Supplied in tablets of 32 mg., 0.1 Gm. and 0.2 Gm.

Mebaral®

tasteless daytime sedative

EFFECTIVE ANTIEPILEPTIC

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Mebaral, trademark reg. U. S. & Canada, brand of mephobarbital

NEW CLINIC BUILT IN ADA



Pictured above is the new Gill-McBride Clinic in Ada. Physicians associated in the clinic are William T. Gill, M.D., Ollie McBride, M.D., Carl D. Osborn, M.D. and Stearley P. Harrison, M.D. The clinic, which contains 20 rooms with 4,300 square feet of floor space, also has a parking area for 40 cars. It is conveniently located cross the street from Valley View Hospital.

ELECTROCARDIOGRAPHY COURSE IS WELL ATTENDED

Two physicians from Canada, and 12 doctors from surrounding states were among those attending the Electrocardiography Course held at the School of Medicine the week of March 3-8, 1952. This postgradute course presented a review of the fundamentals of electrocardiography and resume of the newer applications to this subject including spatial vectors.

The couse was conducted by Robert Bayley, M.D., Ernest Reynolds, M.D., and George Winn, M.D., faculty of the School of Medicine.

The following physicians attended the course:
Alfred T. Baker, M.D., Durant, Oklahoma
H. Richard Bath, M.D., Wilmington, Ohio
R. E. Beamish, M.D., Winnipeg, Manitoba, Canada
R. M. Bellamy, M.D., Pampa, Texas
O. T. Davis, M.D., Owensboro, Kentucky
E. Grey Diamond, M.D., Kansas City, Kansas
Leonard J. Ellis, M.D., Oklahoma City, Oklahoma
R. W. Goen, M.D., Tulsa, Oklahoma
John E. Grnetter, Jr., M.D., Little Rock, Arkansas
A. B. Houston, M.D., Winnipeg, Manitoba, Canada
J. Allen Howell, M.D., Wellington, Kansas
William E. Hubbard, M.D., Oklahoma City, Oklahoma
T. H. Jones, M.D., Waldo, Arkansas
R. R. Kinsinger, M.D., Blackwell, Oklahoma
W. W. Lippert, M.D., Wilmington, Ohio
Vincent Mazzarella, M.D., Hominy, Oklahoma
Dalton B. McInnis, M.D., Oklahoma City, Oklahoma
E. C. Mohler, M.D., Ponca City, Oklahoma
Kenneth S. Lane, M.D., Vinita, Oklahoma
C. A. Laubach, Jr., M.D., Danville, Pennsylvania
J. B. Morey, M.D., Ada, Oklahoma
H. E. Nicholson, M.D., Wheeler, Texas
Orville M. Rippy, M.D., Stillwater, Oklahoma
James R. Ricks, M.D., Oklahoma City, Oklahoma
C. J. Roberts, M.D., Enid, Oklahoma
Herman W. Roth, M.D., Monte Vista, Colorado
S. C. Shepard, M.D., Tulsa, Oklahoma
Harry D. Silsby, M.D., Springfield, Missouri
Vincel Sundgren, M.D., Tulsa, Oklahoma
Dean C. Walker, M.D., Tulsa, Oklahoma
LeRoy A. Wolever, M.D., Midwest City, Oklahoma
Harry C. Wolohon, M.D., Oklahoma City, Oklahoma
J. F. York, M.D., Madill, Oklahoma

HAVE YOU HEARD?

L. B. Word, M.D., Bartlesville, recently spoke on socialized medicine at a meeting of the Washington County Bar Association.

Charles E. Green, M.D., Lawton, discussed the need for a Comanche County Council for Retarded Children at the organizational meeting of the group.

Floyd E. Warterfield, M.D., 82, pioneer Muskogee physician, has been awarded a 50-Year Masonic pin and certificate.

Ray Lindsey, M.D., Pauls Valley, is building a new 30x40 foot wing on his hospital.

F. M. Adams, M.D., superintendent of Eastern Oklahoma Hospital, was principal speaker at a meeting of the Vinita Chamber of Commerce.

E. T. Cook, Jr., M.D., Anadarko, reported on phases of preventive medicine at a Kiwanis club meeting in that city.

Eugene A. Hale, M.D., 1950 graduate of the Univertsity of Oklahoma, is the new full time physician for the Oklahoma State Penitentiary in McAlester.

Cody Ray, M.D., Pawhuska, was guest speaker at the District 13, Oklahoma State Nurses Association.

R. G. Obermiller, M.D., Woodward, recently took a postgraduate course in New Orleans.

Oscar R. White, M.D., Oklahoma City, has been elected president of the University of Oklahoma Board of Regents.

Mark R. Johnson, M.D., Norman, who has been serving with the 45th Division, has been promoted to major.

Malcolm Phelps, M.D., El Reno, has been named to the Board of Directors of the American Academy of General Practice.

J. B. Clark, M.D., Coalgate, has been elected chairman of the council of the new Mary Hurley Hospital of Coalgate.

William P. Longmire, Jr., M.D., son of the late W. P. Longmire, M.D. of Sapulpa, is spending four months in Germany where he will teach at the University of Berlin and do some surgery.

Gordon Livingston, M.D., Cordell, is president of the Kiwanis Club of that city.

J. Raymond Hinshaw, M.D., son of J. R. Hinshaw, M.D., Norman, and surgeon at Strong Memorial Hospital, Rochester, recently lectured at Cornell Medical College, giving some of his findings in his research work as atomic coordinator for the navy.

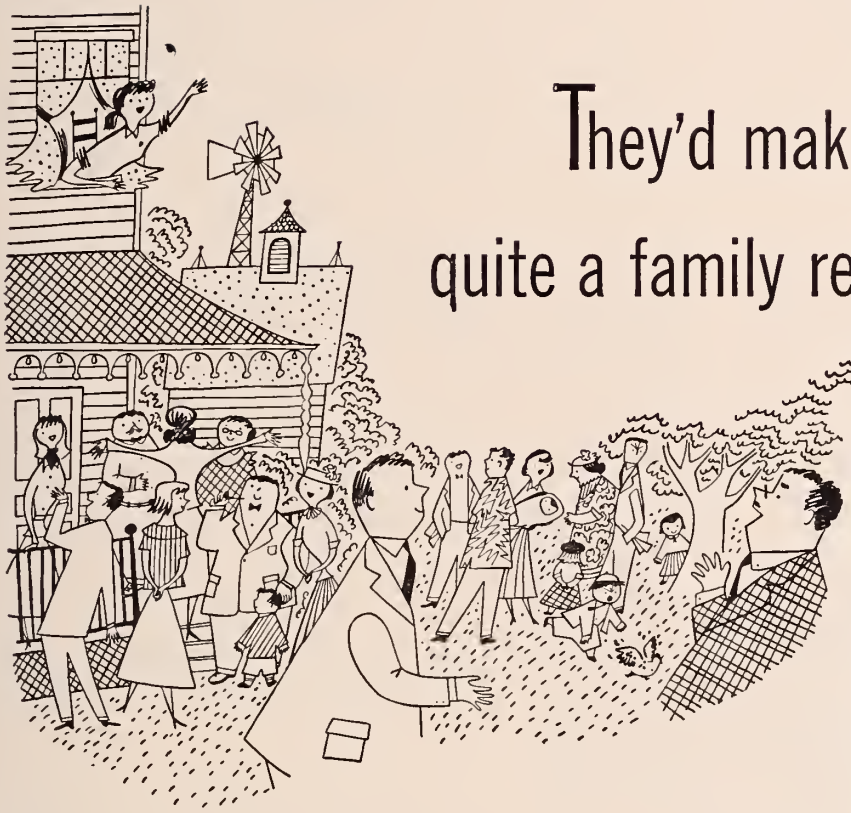
R. H. Mayes, M.D., Anadarko, has been appointed county superintendent of health for Stephens and Caddo counties.

James F. Hohl, M.D., Major (MC) has been awarded the Bronze Star Medal for distinguished service in Korea during the period March 19, to October 6, 1951. Major Hohl served as company commander and regimental surgeon during this phase of operations.

Five Oklahoma Physicians recently participated in postgraduate courses at the Cook County Graduate School of Medicine in Chicago. They are: Fred T. Perry, M.D., Watonga; Glen W. McDonald, M.D., Pawhuska; Eugene H. Arrendell, M.D., Ponca City; Joe L. Duer, M.D., Woodward; and Richard G. Stoll, M.D., Chickasha.
ties.

William Weaver, M.D., Muskogee, presided at one of the sessions when the District No. 3 Nurses Association held a two day institute in Muskogee.

R. R. Hannas, Jr., M.D. will join the McMurry-Stowers Clinic and Hospital in Sentinel July 1 when he finishes his year's surgical residency at the University of Kansas.



They'd make quite a family reunion...

...the 44 patients who represent each of the many conditions for which short-acting NEMBUTAL is effective.

EVEN IF YOU'VE TRIED short-acting NEMBUTAL in no more than a few of its 44 uses, the advantages would still be apparent.

You would already know, for example, how adjusted doses of short-acting NEMBUTAL can achieve any desired degree of cerebral depression, from mild sedation to deep hypnosis.

You would be familiar with the rapid onset, the brief duration, the rare incidence of cumulative effect and "hangover".

And, more important, you would know that short-acting NEMBUTAL's smaller dosage—only about *half* that required by many other barbiturates—results in less drug to be inactivated, marked clinical safety, definite economy to the patient.

For further information, why not write for your copy of the new booklet, "*44 Clinical Uses for* NEMBUTAL". Just address a card to Abbott Laboratories, North Chicago, Illinois.

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SEDATIVE

Cardiovascular
Hypertension
Coronary disease
Angina
Decompensation
Peripheral vascular disease

Endocrine Disturbances
Hyperthyroidism
Menopause

Nausea and Vomiting
Functional or organic disease (acute gastrointestinal and emotional)
X-ray sickness
Pregnancy
Motion sickness

Gastrointestinal Disorders
Cardiospasm
Pylorospasm
Spasm of biliary tract
Spasm of colon
Peptic ulcer
Colitis
Biliary dyskinesia

Allergic Disorders
Irritability
To combat stimulation of ephedrine alone, etc.

Irritability Associated With Infections

Restlessness and Irritability With Pain

Central Nervous System
Paralysis agitans
Chorea
Hysteria
Delirium tremens
Mania

Anticonvulsant
Traumatic
Tetanus
Strychnine
Eclampsia
Status epilepticus
Anesthesia

HYPNOTIC
Induction of Sleep

OBSTETRICAL
Nausea and Vomiting
Eclampsia
Amnesia

SURGICAL
Preoperative Sedation
Basal Anesthesia
Postoperative Sedation

PEDIATRIC Sedation for:
Special examinations
Blood transfusions
Administration of parenteral fluids
Electroencephalography
Minor surgery
Preoperative Sedation

OBITUARIES

J. W. CRAIG, M.D.
1871-1952

J. W. Craig, M.D., a practicing physician in northeastern Oklahoma for more than 60 years, died March 14 at his home in Miami after an illness of five weeks.

Dr. Craig began his practice at his native Shelby, Mo., in 1891. In 1902 he moved to Vinita where he lived for more than 20 years before coming to Miami.

Survivors include his widow, three daughters and a brother.

E. E. NORVELL, M.D.
1872-1952

E. E. Norvell, M.D., Oklahoma City, died April 21 in an Oklahoma City hospital.

Born in Arkansas, he was a graduate of Vanderbilt University Medical School. Until his retirement last year, he had practiced medicine in Oklahoma City 21 years. Prior to moving to Oklahoma City, he had practiced in Shawnee and Wynnewood. He was a member of the Baptist church, Odd Fellows lodge and was a 32nd degree Mason.

ROBERT KEYES, M.D.
1877-1952

Robert Keyes, M.D., Ada, died February 26 in an Ada hospital.

Doctor Keyes, who retired 10 years ago because of poor eyesight, was born at LaFayette, Ga., and came to Indian Territory as a young physician practicing in Seminole and Okfuskee Counties.

He was a member of the Methodist church, a 32nd degree Mason and was active in civic affairs.

Survivors include the widow, two sons, one sister, one niece and one nephew.

DAVID W. GILLICK, M.D.
1895-1952

David W. Gillick, M.D., chief medical director of the Talihina Medical Center, died April 30.

Doctor Gillick was born in St. Louis, Mo., and received his M.D. degree in 1919. He had served since 1921 in various Indian hospitals in New Mexico, Kansas, Oklahoma, Mississippi, North Carolina and Florida. He was active in the Knights of Columbus and the Talihina Lions club.

Survivors include his widow, one son and one daughter.

ATTEND A.C.P.

Nine Oklahoma City physicians, six from Tulsa and one each from Ada and Kingfisher attended the American College of Physicians in Clevelaud, Ohio, April 21-25, 1952.

Those attending were: from Oklahoma City—Turner Bynum, Robert Howard Furman, Philip Marsden McNeill, Heury H. Turner, James R. Colvert, Wann Langston, Robert C. Lawson, W. T. McCollum and Henry Louis Schmidt, Jr.,; from Tulsa—A. A. Hood, Homer A. Ruprecht, H. E. Ryder, Marcella R. Steel, Paul Theodore Strong, Albert Wicken Wallace; and J. B. Morey, Ada; and John Robert Taylor, Kingfisher.

MEDICAL SOCIETIES AROUND THE STATE

Cleveland County

Executive Secretary Dick Graham was guest speaker at a recent meeting of the Cleveland County Medical Society. A medical motion picture was also shown at the meeting.

Garfield-Kingfisher

"Recent Advances in Treatment of Cancer" was J. Samuel Binkley's, M.D. topic when he addressed a recent meeting of the Garfield-Kingfisher County Medical Society. Doctor Binkley is from Oklahoma City.

Woods-Alfalfa

Two Wichita physicians, Harry O. Anderson, M.D. and John W. Warren, M.D. were guest speakers at a meeting of the Woods-Alfalfa County Medical Society. Doctor Anderson spoke on "Painful Feet" and Doctor Warren's topic was "Newer Treatment for Kidney Stones."

Atoka-Bryan-Coal

Speaking on the activities of the State Association and the A.M.A., L. Chester McHenry, M.D., 1951-52 Presideut, spoke to the members and Auxiliary of the Atoka-Bryan-Coal County Medical Society at a banquet in Durant recently.

Northwestern

Members of the Northwestern Counties Medical Society met at the Williams Clinic in Woodward for a recent meeting and postgraduate lectures on "Reviews of General Medicine."

Kiowa-Washita

Members of the Kiowa-Washita Counties Medical Society and Auxiliary met in Mt. View for a dinner meeting recently. Following the dinner, a film from the American Academy of General Practice meeting was shown to the Society.

A.M.A. IS JUNE 9-13

When the 101st annual meeting of the American Medical Association opens in Chicago June 9-13, doors will be opened to the public for the first time through the medium of television.

Two half-hour, coast-to-coast telecasts of the convention are planned. As the nation's top medical authorities report on the very latest developments in the field of science and medicine to approximately 14,000 colleagues attending the meeting, mobile television cameras will transmit the uews to the rest of the nation.

The programs will be carried over the N.B.C. television network at 9:30 p.m. (E.D.S.T.) Tuesday, June 10, and at another date to be announced later. They will be sponsored by Smith, Kline and French Laboratories, a Philadelphia pharmaceutical firm, in cooperation with the A.M.A.

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New aureomycin minimal dosage for adults—four 250 mg. capsules daily, with milk.

AUREOMYCIN

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CURRENT ACTIVITIES AT THE OKLAHOMA MEDICAL RESEARCH FOUNDATION

EDWARD C. REIFENSTEIN, JR., M.D.
DIRECTOR



This is the seventh in a series of monthly articles concerning the activities of the Oklahoma Medical Research Foundation. In this article will be discussed the activities in the field of clinical research in Endocrinology and Metabolism now under way at the Oklahoma Medical Research Institute and Hospital. This program is under the direction of Dr. Edward C. Reifenstein, Jr., Head of the Section of Endocrinology and Metabolism and Dr. R. Palmer Howard, a member of the Section of Endocrinology and Metabolism.

In addition to the funds that have been supplied by the Oklahoma Medical Research Foundation, grants made by several other organizations are being utilized in this program. These include a grant-in-aid from the National Institute of Arthritis and Metabolic Diseases, the Upjohn Company, the Ciba Company, Ayerst, McKenna and Harrison, Limited, and Chemical Specialties Company, Incorporated.

One of the chief interests of the section is in disturbances of calcium metabolism and metabolic bone disorders. The initial problem to be investigated will involve a study of patients with atrophy (osteoporosis) of bone from disuse. In the normal individual, bone is in a state of dynamic equilibrium, with bone resorption and bone formation going on simultaneously in different parts of the bone. Physical activity and weight-bearing provide the physiologic stimuli for bone formation in the normal individual. When a person is immobilized with illness, however, bone formation is reduced, and since bone resorption continues, the bones become thin or atrophic; the bone disease that is thus developed is called osteoporosis of disuse.

The investigations planned at the Oklahoma Medical Research Institute and Hospital in relation to osteoporosis of disuse have to do with determining whether or not patients with this disorder respond favorably to therapy with estrogens, androgens and similar compounds. In previous work done by the writer with Dr. Fuller Albright of Boston, Mass., it has been demonstrated that these compounds have a beneficial effect on the osteoporosis found in post-menopausal women and in senile men and women.

In order to study the problem, the response of patients with osteoporosis of disuse to steroids will be measured by a number of simultaneous observations including: (1) the composition of bone specimens taken by biopsy, (2) the density of bone in roentgenograms, (3) the localization of radioactive isotopes in bone, (4) the mineral and nitrogen balances, and (5) the clinical status. As the study progresses it will be possible to determine whether or not the response of patients with atrophy of disuse to the steroids is similar, quantitatively and qualitatively, to that of patients with post-menopausal and senile osteoporosis who are known to respond favorably to these materials. Finally, it is hoped that this study will lead to knowledge as to whether or not the administration of such steroids will have a preventive as well as a therapeutic role in relation to the osteoporosis of disuse.

Balance studies will be performed in individuals who have been immobilized by orthopedic or surgical procedures for a considerable period of time, or until there is gross x-ray evidence of osteoporosis, and who will still require further immobilization for the period of the study. Such individuals will be investigated by the technics outlined, for several metabolic periods before, and for several after, the administration of the steroids. Such studies will provide clues as to the therapeutic effectiveness of these agents.

In order to determine whether or not the steroids have a preventive role, studies will be made in previously healthy adult individuals who are required for some medical or surgical reason to undergo an operative procedure which will be followed by prolonged immobilization. These patients will be given steroid therapy either before or immediately after operation and will be compared with suitable control studies, so that it will be possible to determine whether or not there has been any preventive effect of the therapy on the development of atrophy of disuse.

The patients will be studied in the Oklahoma Medical Research Hospital and all of the biological specimens will be analyzed in the Central Laboratory of the Oklahoma Medical Research Institute and in the individual laboratories of the collaborating investigators. The patients will be placed on constant diets, the composition of which will be determined. The urine and feces will be collected, and balances of nitrogen, calcium, phosphorus and other minerals will be determined according to standard technics. Excretions of such substances as creatine, creatinine, uric acid, amino acids, glucose, steroids, and gonadotropins will be determined. The serum levels of protein fractions, glucose, alkaline phosphatase, and chemical elements, such as phosphorus, calcium, and other minerals, will be followed. Hematological studies will include determinations of the hemoglobin concentration and the numbers of formed blood elements.

Bone tissue from a site involved by the atrophy of disuse will be obtained before, during, and after various therapeutic procedures. The specimens, when removed, will be studied by roentgenographic procedures, by histochemical methods, by histological technics, and by biochemical analyses. Roentgenograms of the vertebral column, pelvis, lower extremities and other involved bones will be taken at frequent intervals with attention to standardization of posturing, filming, and developing procedures, in order to minimize the errors in interpretation due to variations in these technics. It is planned to use a specifically-designed and constructed photoelectric microdensitometer for making objective estimations of mineral density in bones from the roentgenograms. Other investigations of the mineral balances will be undertaken by the utilization of isotopes, such as phosphorus^{32} or strontium^{89}. These studies will be carried out in conjunction with the Coordinator of Isotope Studies for the Oklahoma Medical Research Institute and Hospital, Dr. Cleve Beller. Tracer amounts of the isotopes will be administered to certain individuals at appropriate times prior to the biopsy of bones, in the periods before, during and after the administration of the various steroids. The amount excreted in the urine and feces will be determined; the amount present in the bone specimens will be measured. In addition, an attempt will be made to determine the exact cellular localization of the isotope in bone tissue before and during therapy by radioautography.

The data from such studies will be interpreted in several ways: each patient will serve as his own control;

then as the data accumulate, the patient on a specific therapy will be compared with another on the same therapy; later on, he will be compared with patients on different therapies. Finally, the response of patients with osteoporosis of disuse will be compared with that of patients with post-menopausal and senile osteoporosis as reported in the literature and as observed in the previous studies by Doctor Reifenstein, and also in investigations done independently by Doctor Howard.

It should be pointed out that bed confinement has been curtailed in recent years in many forms of illness. However, in certain conditions, such as fractures of the lower extremities, essential surgical procedures, and other severe medical illnesses, immobilization cannot be avoided, and hence osteoporosis of disuse occurs. Physiotherapy has been the only treatment employed. Steroid therapy has not been used in this form of osteoporosis except in very preliminary studies involving a very small number of patients. These preliminary studies are not adequate to form a basis upon which to recommend further therapy. It is of both scientific and practical clinical interest to ascertain whether or not the condition of osteoporosis from disuse may be treated and/or prevented by steroid hormoues. The therapeutic value of such therapy has already been demonstrated in post-menopausal osteoporosis by Albright and his collaborators.

Applications have been made to several organizations for support of further work on calcium metabolism and particularly for studying in more detail the action of parathyroid hormone on bone. This latter problem is one of considerable interest. There is very good evidence that the patients can have large excesses of parathyroid hormone arising from adenomas of the parathyroid glands without having any involvement in bone that is demonstrable by the methods now available by roentgenographic study or bone biopsy. It is known that parathyroid hormone alters the excretion of phosphorus into the urine and as a result undersaturates the body fluids in terms of the calcium $\times$ phosphorus product. This undersaturation of the body fluids frequeutly is met by an increased intake of calcium, and then it is unnecessary to withdraw any calcium from the boue. However, there is evidence from animal experiments that parathyroid hormone under certain circumstances does have a definite, direct action on bone. The conditions under which these two different actions occur are not well defined and it is proposed to find out by a series of experiments in animals and man under exactly what conditions parathyroid hormone will have its effect only on the excretion of phosphorus in the urine, and under what conditions it will have an action on resorption of bone.

A number of studies dealing with endocrinology are in progress also at the Oklahoma Medical Research Institute and Hospital. In these studies, Doctor Reifenstein and Doctor Howard are collaborating with Dr. Henry H. Turner of Oklahoma City, who is Chief of the Endocrine Clinic at the University of Oklahoma School of Medicine, University Hospital. This clinic is now being expanded to include a large number of patients with a multiplicity of endocrine disturbances. Materials for diagnosis and treatment of certain of these endocrine disturbances have been made available to the investigators, for use in the clinic, by several of the pharmaceutical companies.

One of the studies of particular interest which is being supported by a pharmaceutical company is that of the determination of the relative effectiveness of certain forms of androgenic preparations which are said to have prolonged action following a single injection. Comparison of the effect of the usual preparations with the new long-acting ones will be made on the basis of the appearance of steroid metabolites in the urine and of the alterations in the anabolism of protoplasm in balance studies.

Another study of considerable interest is an effort to evaluate the effectiveness of a series of new estrogenic compounds. Alterations in gonadotropin excretion and in the nature of vaginal smears are being utilized as end-points and in evaluating these compounds. Another long-range study is under way involving the effectiveness of various steroid compounds in mycological infections in both *in vivo* and *in vitro* studies in animals, and also in clinical studies of patients with such infections. The use of certain steroid preparations in psychiatric disorders is also being investigated. The current investigations also include two other problems: precocious puberty, and the status of the testes in patients with endocrine disorders and in persons with chronic non-endocrine diseases associated with debility.

In addition to the work described above, which is in the field of clinical investigation of the problems of endocrinology and metabolism, animal and chemical studies in the same field are also under way, directed by Dr. Charles D. Kochakian of the Oklahoma Medical Research Institute. Doctor Kochakian made the initial observations on the anabolic effect of androgenic substances such as testosterone. He has been engaged for a number of years in studying the factors involved in this anabolism, and has made many contributions to our knowledge concerning the intermediary metabolism of testosterone. He has also studied the effect of steroids upon the size of the kidney and upon the size of the muscle in several species of animals. He has been studying the effect of various steroids, growth hormone, thyroid, and insulin upon a number of enzyme systems in the tissues of animals. He has also studied the action of parathyroid

(Continued on Page 237)

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BOOK REVIEWS

HANDBOOK OF NUTRITION. A symposium prepared under the auspices of the Council on Foods and Nutrition of the A. M. A. Second Edition. New York, Philadelphia, Toronto, The Blakistou Company. 1951.

Make no mistake about it. The time is fast approachiug when no physician will feel adequately fitted for his profession who does not have a scientific understanding of nutrition since nutrition is rapidly becomiug applied human biochemistry. To prepare for this day the Handbook of Nutrition recently published under the auspices of the A.M.A. serves admirably; (1) to bring together in one volume much that is now known about protein, fat, carbohydrate, vitamins and minerals and (2) to reacquaint the physician with recognized experts in each field whose further publications may be followed in the Journal of the A.M.A. aud other medical literature.

To reveal one of the reasons why physicians must keep up-to-date, Dr. James S. McLester states in the foreword: ''Only a few years ago a host of ills were ascribed to proteiu decomposition products, and anything approaching liberality in proteiu intake was believed to be distinctly harmful. All of this is now changed. The physician has made a complete about face, and clinical opinion enthusiastically favors rather than frowns on a liberal protein allowance.''

The book coutains over 700 pages.—Lucille Spire Blachly, M.D.

SAVAGE SON. Oren Arnold. University of New Mexico Press, Albuquerque. 1951. Price $4.50.

In this attractive little volume of approximately 300 well printed pages, the author has vividly preseuted the exciting saga of a savage Apache Indian from the remote Arizona desert. Barely escaping the massacre of his people at the hands of the Pimas; released from captivity to an educated parepatetic photographer at the age of six for 30 pieces of silver; rapidly achieviug civilization through worldly knowledge, travel and formal education apparently aided by a spark of genius; the study of medicine with a remarkable medical career at various agencies under the Indian Bureau culminating in a busy practice with high professional ratiug in Chicago and finally the development of diabetes and pulmonary tuberculosis with complete reversion to the blanket on the Arizona desert where he died with the bare necessities known to his tribe at the time of his birth in the 1860's.

Knowing from personal experience the potential possibilities for his people (all Indians) and observing the traditional shortcomiugs of government paternalism, he became militant in his fight for racial freedom with socio-economic and moral opportunities. Being utterly disappointed in the Bureau's response and the Indians' indifference, this bouyant popular Chicago physician succumbed to both physical and mental exhaustion aud apparently assumed the racial silent, fatalistic attitude not only toward his beautiful wife but towards his friends aud his work and disappeared from the scene of civilization.

There is pleasure in the reading of this story and for Oklahomans who live in coutact with nearly one-third of all the Indians in the U. S., it should prove profitable.—Lewis J. Moorman, M.D.

PROCEEDINGS OF THE SECOND CLINICAL ACTH CONFERENCE. John R. Mote, M.D., Editor. Two volumes. The Blakiston Compauy, 1951.

In 1950 the availability of fairly large quantities of ACTH resulted in the acceleration of investigative and therapeutic studies. In order to exchange further information and data between investigating groups, the Armour Laboratories called the Second Clinical ACTH Conference in December, 1950. One hundred and four papers were presented.

The proceedings are published in two parts—a first volume designated as ''Research,'' and a secoud volume designated as ''Therapeuties''; but there is of necessity a constant overlapping iu both volumes siuce all the papers are presentations of research either fundamental or clinical. Study of these two columes reveal a marked extension of knowledge concerning the role of the adrenal gland in health and disease, aud the practical applications of ACTH in treating different disease syndromes. In the first volume stress is on the role of the adrenal cortex in electrolyte, carbohydrate, protein, fat, and vitamin metabolism. Effects of adrenal cortical stimulation on liver disease and on hemopoietic system are presented. Other studies relate to iuflammatory disease, especially of the eye, and the tissue response to injuries, especially burns. Finally results of studies on development of antibodies and hyperseusitivity are presented.

In the second volume, after papers of general interest such as long actiug forms of ACTH, intravenous use of ACTH, the possibility of relative Adrenal Cortical insufficiency iu many diseases, results of treatment with ACTH in various diseases are presented. The number of disease syndromes where the drug is indicated has been reduced. The reader is impressed with this as he reviews the studies on metabolic or endocrine abnormalities, muscular and demyelinating diseases, malignancies, hemopoietic diseases, surgical and stress conditions, iufectious diseases, hypersensitivity states, inhibition of tissue reaction to toxic materials, acute inflammatory conditions of unknown etiology, skin diseases and collagen diseases.

The result of the studies reveal that the problems of the therapeutic use of ACTH in the treatment of specific disease syndromes, though substantially clarified is far from solved. Those who would use this poteut drug should study these two volumes and follow closely the succeeding publications.—Sumner Yale Andelman, M.D.

Rx FOR MEDICAL WRITING. Edwin P. Jordan, M.D. and Willard C. Shepard. W. B. Saunders Company. 1951.

This brief, concise book of less than 100 pages should be essential to anyone who contemplates writing a book or even a paper on a medical subject.

The book is divided into essentially three parts, the chapters on medical writing, the chapters on illustrations, and the appendices.

The chapters on medical writing are systematic and concise and cover the preliminary needs, the various drafts of the manuscript, the need for a beginning that will inspire the reader to contiuue and an endiug that will cover the summary and conclusions adequately.

The chapters on the illustrations cover the subject thoroughly and contain enough illustrations to explain the need and type of illustrations best suited to the manuscript contemplated.

The remaining chapters cover in detail the subject of the use, the essentials, and the various types of statistics that are employed in medical papers and by reading this summary the medical writer will certainly improve the presentation of this portion of the manuscript which in so many cases are essential for a good presentation of the subject.

The appendices cover the important subjects as references, abbreviations, proofreader's marks, and various essential tables that are important for a finished paper.

The book can be recommended as essential for practically all members of the medical profession as at some time everyone prepares a manuscript for presentation before some branch of the medical association and by properly preparing himself by following the essentials as outlined here, the medical writer can present a better medical paper in a more concise manner, cover the subject adequately without using unnecessary words, illustrations and statistics.—E. Eugene Rice, M.D.

CLASSIFIED ADS

FOR SALE FOR CASH: Standard office scale, adjustable chair table, instruments (including forceps, scissors, knives, probes, speculae, etc.), instrument stand with glass enclosed cabinet, monocular microscope, Simplex one-speed centrifuge (electrically operated), leather ob. bag and leather Boston bag (medicine case), both bags fitted. Library includes texts old and new and Davis' Gynecology and Obstetrics, and Tice and Brenneman's Practice of Pediatrics. For further information contract Mrs. H. A. Higgins, 820 E. Street, N.W., Ardmore, Phone 4894.

OKLAHOMA MEDICAL RESEARCH FOUNDATION

(Continued from Page 235)

hormone, and has found that in animals it causes diuresis of phosphorus in the urine, but it does not change the phosphatase enzymes in the kidney.

In summary, therefore, the problems of calcium metabolism and bone disease, particularly the bone disease of aging people and atrophy of disuse, are under intensive investigation at the Oklahoma Medical Research Institute. A number of other important problems are being studied by the personnel of the Institute, utilizing the facilities of the University of Oklahoma School of Medicine, University Hospital with its clinics, the laboratories of the Research Institute and the facilities of the Research Hospital. The investigations in the field of endocrinology and metabolism have already attracted considerable attention among physicians, and it is anticipated that when this phase of the program of the Oklahoma Medical Research Foundation gets fully activated, it will be of great interest to the physicians and to the citizens of the State.

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EDITORIALS

A PUZZLING PARADOX

While many people living in many countries less fortunate than our own have an annual individual income of less than $50.00 and die from malnutrition and disease before they reach the age of 35, our hearts are softened and our purse strings loosened. We send billions in money and the equivalent in knowledge, skills, machinery and personnel.

While this worthy humanitarian program is in the process of execution, our own socio-economic and political policies in Washington and the stealthy insinuation of socialistic doctrines in our schools are preparing us for a national decline which will bring poverty, malnutrition, disease and death with abbreviated longevity paralleling that we see so clearly in other countries now characterized as underprivileged.

In his *Ode to the Roman People*, Horace extolled the adequacy of Rome's defensive powers until destroyed by internal strife and corruption which he epitomized as follows, ". . . but we, an impious race, whose blood is devoted to perdition shall destroy her (Rome); and this land shall again be possessed by wild beasts."

What we are doing to help people in unfortunate countries is most commendable, what we are doing toward the destruction of the freedoms and the opportunities our American children have a right to expect is damnable and unforgivable.

The least we can do is to let our lawmakers and our bureaucrats know what we think. Do we think enough of our own future as American citizens and our children and our American way of life to write our protest. Only concerted, militant, crusading against dishonesty and corruption in government and the growth of socialization with governmental support can save the country and redeem our traditional reputation for individual and national integrity.

WORTH QUOTING

In the light of world affairs and present day confusion, the following words from Pasteur spoken at the opening of the Pasteur Institute are of great significance:

"Two contrary laws stand today opposed; one a law of blood annd death, which, inventing daily new means of combat, obliges the nations to be ever prepared for battle; the other a law of peace, of labor, of salvation, which strives to deliver man from the scourges which assail him. One looks only for violent conquest; the other for the relief of suffering humanity. The one would sacrifice hundreds of thousands of lives to the ambition of a single individual; the other places a single human life above all victories. The law of which we are the instruments essays even in the midst of carnage to heal the wounds caused by the law of war."

OWED TO OXYGEN

When we were only unicellular organisms groping in slime, we were dependent upon oxygen. Through eons of time we existed by virtue of oxygen though utterly ignorant of its presence. Our debt is great and long overdue. Not until the turn of the 18th Century did we learn about gasses and the modern theory of respiration. In 1757 Joseph Black discovered hydrogen (1766). Nitrogen was discovered by Rutherford (1772); oxygen by Priestly and Scheele (1771), and Lavoisier (1775).

Now we know that one-fifth of the atmosphere is oxygen and that it composes eight-ninths of water and about one-half of the globe's crust.

According to recent investigations, our simian forbears were elevating the oxygen content of their blood when they swung down from the trees and exercised their brains to draw up the first declaration of human independence at the foot of a tree (Hooton). John Wheelock (1754-1817) was

doing the same when he opened a medical course at Dartmouth College with this prayer:

"O, Lord, we thank Thee for the oxygen gas; we thank Thee for the hydrogen gas; and for all the gases. We thank Thee for the cerebrum, the cerebellum and the oblongata." Wheelock did not know that he was drawing upon a high level of oxygen when he uttered this prayer; he did not realize how dependent the brain is upon oxygen. Nevertheless, he placed the objects of his gratitude in their proper order.

Now comes Doust, Lovell and Schneider[1] with experimental evidence connecting oxygen with the long recognized mystery of sleep and mental alertness. They have observed that sleep is associated with a low oxygen blood level (87 to 88 per cent) and that during the normal waking hours the level is about 96 per cent. Evidently the oxygen level was running low when, in *A Midsummer Night's Dream*, Shakespeare said, "and I pray you let none of your people stir me. I have an exposition of sleep come upon me."

With all our knowledge we can say no more than was said by Cervantes . . . "sleep is the best cure for waking troubles."

1. Doust, J. W. Lovell; and Schneider, Robert A.: Studies on the Psysiology of Awareness: Anoxia and the Levels of Sleep. Brit. Med. J., p. 4756 (March 1) 1952.

PRAYER

The physician who does not pray for guidance is lost; the psysician who does not pray for mercy has buried his shortcomings in the fathomless depths of his egotism and ignorance—God help him.

TWO SMALL BOOKS

Even in Solomon's day it seemed there was no end to making of books. Yet William Osler would not set sail without them, though he recognized words as ". . . dangerous things. They change colour like a chameleon, and they return like a boomerang."

The little Book by Edwin P. Jordan and William P. Shepard,[1] *Rx for Medical Writing* is designed to help the medical writer to choose words with a definite meaning and to give them a fast color and a fixed place in the expression of thought. In a few pages he supplies the necessary ingredients and shows how to mix them.

Dr. Walter R. Bett, who teaches medical writing in Great Britain said in an address on the art and techinque of medical writing at the University of Oklahoma School of Medicine, that if he had known such a book had been written on the subject, he would have considered his address unnecessary. Even case records deserve good writing; medical reporting for publication demands it. Doctor Jordan's little book of 112 pages tells how it is done.

In the handy pocket size *Osler, the Man and the Legend*, Walter R. Bett[2] has produced a fine example of good writing. With well chosen words he has packed 125 pages with more pertinent facts about William Osler and his work than can be found in any comparable volume devoted to the master clinician, teacher, author, bibliophile and medical humanist. If there is a "must" among books on the cultural side, this is it. Read and write while you run, that something may remain when the race is done.

Since the charm of Osler's physical presence passed more than 30 years ago, we should look in this fascinating little volume ". . . . for the reasons why Osler should still seem to float so naturally on the unemotional ocean of our professional lives."

1. Rx for Medical Writing. Edwin P. Jordan, M.D. and William C. Shepard. W. B. Saunders Company, Philadelphia, London, 1952.
2. Osler: The Man and the Legend. W. R. Bett, William Heinemann, London, 1951. 15s. net.

A GREAT VOICE

Are we losing our freedom because this voice is silent? Why not revive the murmur by letters to our representatives in Washington from the hills and vales throughout the country. Think on this from Woodrow Wilson and write:

"The great voice of America does not come from the seats of learning. It comes in a murmur from the hills and woods and farms and factories and the mills, rolling and gaining volume until it comes to us from the homes of common men."

TRUSTY WEAPON PRESENTED TRUSTEES

Believe it or not, a gavel made from a piece of wood from the reconstructed White House is now in the hands of the Trustees of the American Medical Association. Immediately two questions arise; how did the wood escape the political termites and who is the donor?

Let us hope it is a good omen but for the present we suggest that the Trustees knock on wood—wood of the White House.

Scientific Articles

"CARCINOMA OF THE CERVICAL STUMP"*

(A Plea for Early Diagnosis and Prevention)

GERALD ROGERS, M.D., F.A.C.S.

OKLAHOMA CITY, OKLAHOMA

The incidence of carcinoma of the cervical stump in collected statistics, varies from 0.1 to 7.4 per cent of sub-total hysterectomys performed. Ward and Sackett[1] report, in their clinic, 56 cases in 752 patients, a percentage of 7.4 per cent. Farrar[2], at Women's Hospital in New York City, found stump cancer in seven per cent of the cervical cancers treated in their hospital. Healy and Arneson[3] found 67 stump cancers, (2.6 per cent) in 2,600 cancers of the servix at the Memorial Hospital in New York.

A study of the incidence of cancer in the cervical stump, after supra vaginal hysterectomy, more generally known as "carcinoma of the cervical stump," naturally includes a consideration of associated problems. One of these is to ascertain how often cancer is found, or develops, in the cervical stump. The combined reports of others may be noted, as well as cases occurring under one's own observation. Eight patients with carcinoma of the cervical stump seen in five years in my private and consultation practice inspired this study. A second problem is whether the cancer of the cervical stump was overlooked at the time of the hysterectomy or whether it developed sometime afterwards, and what treatment has to offer these patients. A third problem, and one of greatest importance, is how may this unfortunate complication be avoided.

The patients developing carcinoma in the stump of the cervix are usually divided into two groups:

1. True carcinoma of the stump: those which occur in the stump three or more years after surgery.
2. Persistent carcinoma of the cervical stump: those which occur in the stump less than than four years after the removal of the corpus.

Different authors use from one to three years as the time interval following hysterectomy in formulating standards as to which are true carcinomas of the stump. Three years is the most commonly accepted period. The former group usually presents a mistaken diagnosis. It is likely that the lesion was there at the time of the sub-total hysterectomy but was not detected. This is the group that can be decreased by more adequate evaluation of the cervix if complete removal is not contemplated.

The diagnosis of cervical carcinoma in its asymptomatic stage may be extremely difficult, even for the experienced gynecologist. Early carcinoma is characterized by histological changes which produce no gross lesions. Symptomatic carcinoma, in more advance stages, can be positively diagnosed only by biopsy or cytologic studies. Cervices of normal appearance, or having mild degrees of cervicitis and erosion, may harbor carcinoma. The diagnosis of cervical carcinoma always depends ultimately on pathologic study, whether the carcinoma be early or well advanced. No method of palpation or visualization of the cervix will dependably enable one to decide that a patient does or does not have carcinoma.

Diagnostic methods have been perfected in recent years to stimulate interest in the diagnosis of early lesions of the cervix. Schiller's[4] iodine test, I feel, to be of distinct value. Not as a specific test for cancer, but its chief value is in indicating to the physician which areas should be biopsied. It is based upon the observation that normal aquamous epithelial cells contain glycogen

*Presented at the Annual Meeting of the Oklahoma State Medical Association, May 19, 1952, Oklahoma City, Oklahoma.

which stains dark brown with Lugols Solution. Cancer cells exhibit excessive glycolytic activity and, therefore, do not take the stain. The exfolliative cellular methods first introduced by Papanicolaou and Traut,[5] furnish a simple and reliable method of preliminary diagnosis and determination of which cervices should have additional examination. If the smears or spreads contain cells indicative of neoplastic activity, further investigative and confirmatory studies must be undertaken. Various types of endocervical curettes also furnish valuable aid in obtaining strips of endocervical mucosa to determine those carcinomas which may be present within the canal. It is to be emphasized, however, that the actual diagnosis of cervical carcinoma depends upon actual material recovered from biopsy properly embedded and stained. The only real controversy concerning the treatment of carcinoma of the cervical stump, has to do with prophylaxis. Arguments continue and the literature is replete with articles advocating total versus supravaginal hysterectomy in benign surgical lesions of the uterus. Proponents of total hysterectomy emphasize the incidence of carcinoma arising in the cervical stump which the literature shows to be about eight of every 1000 supravaginal hysterectomy cases. Though not germain to this discussion they also cite the frequency with which infections and other benign complications arise in the retained cervical stump.

To validate the claim that total hysterectomy should be done to salvage patients otherwise doomed to develop carcinoma of the cervical stump, it is obvious that total hysterectomy should show a mortality as low as that of supravaginal hysterectomy. Prior to the development of modern chemotherapeutic and antibiotic drugs, the statistics showed definitely a higher mortality with the total procedure. More recent figures, however, show that there is little, if any, difference in the mortality between the two operations when performed by capable pelvic surgeons. If one elects to do supravaginal hysterectomy in some cases, and totals in others, where should the dividing line be drawn? When the cervix is allowed to remain, there is some question as to the amount of protection offered by deep conization of the cervix from above and either cauterization or conization of the vaginal portion from below.

Ward flatly states that conization and cautery offer nothing in the prevention of carcinoma of the cervical stump since over 80 per cent arise from the portio vaginalis and he adds that the procedures increase the morbidity of the operation by opening paths of infection when the usually infected cervix is disturbed. It is recommended that total, in preference to supravaginal sub-total hysterectomy be performed in the surgical treatment of benign lesions of the uterus, and that sub-total hysterectomy, if done at all, be ultilized only in the selected cases in which a very careful examination indicates the cervix to be entirely healthy and without the presence of any pre-cancerous lesions or hidden malignancy. We certainly do not advocate the total procedure when it involves undue hazard or frank foolhardiness.

It is hoped, in this way, to salvage the estimated eight out of every 1000 supravaginal hysterectomy cases who subsequently develop carcinoma of the cervical stump. Our plea is not for complete hysterectomy in all patients requiring removal of the uterus. We feel that this decision rests with the individual surgeon. We do wish to vigorously emphasize that the operator should know the status of the cervix prior to any type of hysterectomy. When contemplating a hysterectomy, the cervix should be thoroughly examined. The presence of a myoma does not eliminate carcinoma of cervix. On the contrary, many authors believe that carcinoma of the cervix occurs more frequently in the patients with myoma of the uterus. Likewise, nulliparity does not mean that a patient does not have, or will always remain free from carcinoma of the cervix. Mere inspection of the cervix is not enough. If the cervix has a normal appearance, and the operator is not planning a complete operation, he should, at least, obtain cervical cytologic smears to be sure there is no hidden neoplastic disease. The responsibility does not end here. After the incomplete operation, the patient should be followed and the cervix checked at periodic intervals. If the cervix is eroded or lacerated, it should not be divorced from the uterine corpus by the sub-total method. The patient deserves the complete operation.

Many feel that the sub-total hysterectomy combined with coning of the cervix, either above or below, is adequate. This is not our belief. It is impossible to remove the entire portio vaginalis by this method, hence carcinoma is still a threat. It is to be remembered as an accepted fact, that the incidence of carcinoma of the cervix is no higher in

the stump than carcinoma of the cervix in the intact uterus. The accident to be avoided is the catastrophic one of amputating the corpus thru a cancerous cervix or the embarrassing one of discovering a few days, or a few months, after the incomplete hysterectomy, that the patient has cervical cancer. Unsuspected carcinomas of the cervix are not uncommonly found in uteri removed by total hysterectomy. It must be conceded that knowing of this prior to operation would enable the surgeon to render more intelligent and beneficial service to his patients.

The treatment is the same as for any carcinoma of the cervix. By intracavitary use of radium, only one capsule can be placed in the cervix. A fairly effective dose of gamma Roentgens can be given by use of a colpostat with wide lateral placement of the sources of radium. The results of this treatment are little short of those obtained in cancer of the cervix in general which, in our experience, is 40 per cent of five year survivals. The use of interstitial needles offers another means of application. In advanced cases, a radium plaque held in place with a rubber bath sponge is useful.

Roentgen therapy, by the transvaginal cone, may in some of these cases be superior to intracavitary radium, especially those in which the intracervical tube cannot be well placed.

SUMMARY

1. The incidence of carcinoma of the cervical stump is discussed.
2. Total hysterectomy is the operation of choice of benign lesions of the uterus when feasible.
3. Careful evaluation of the cervix by all diagnostic methods.
4. Malignant disease arising in the remaining cervical stump is almost always preventable. Complete removal of the uterus is usually feasible. It is inevitable that a certain per cent of cervical stump carcinomas will occur so long as the sub-total hysterectomy is performed.

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MEET OUR CONTRIBUTORS

Don H. O'Donoghue, M.D. and *Marvin B. Hays, M.D.*, both of Oklahoma City, have an article on "The Patella, Basic Considerations," in this issue of the Journal. Doctor O'Donoghue was graduated from the University of Iowa College of Medicine and interned at the Iowa University Hospitals and served his residency at the University and Crippled Children's Hospitals; Oklahoma City. He has been certified by the American Board of Orthopedic Surgery and is a member of the American College of Surgeons, International College of Surgeons, American Academy of Orthopedic Surgery and the Association of Orthopedic and Fracture Surgery.

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Gerald Rogers, M.D., Oklahoma City, has an article on "Carcinoma of the Cervical Stump—A Plea for Early Diagnosis and Prevention" in this Journal. Doctor Rogers was graduated from the University of Oklahoma School of Medicine and served his internships and residency in Chicago and Detroit. He is a member of the American College of Surgeons and has been certified by the American Board of Obstetrics and Gynecologists. He servey in the navy in World War II.

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A METHOD OF MANAGEMENT FOR THE INFERTILE COUPLE*

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TULSA, OKLAHOMA

It is unfortunate that as much progress in general have stimulated interest in the infertile couple. As a result considerable progress has been made in aiding these unfortunate people. The work of Dr. I. Rubin of New York has been most stimulating in this field.

It is unfortunate that as much progress has not been made in the work with the male as with the female partner. Unfortunate because much must be learned of infertility in the male also if a great number of these couples are to be helped. Only recently has emphasis been placed on the study of both partners. Wives have had extensive study, and at times even surgery to correct infertility and the status of the husband has never been questioned. A basic requirement for conception, an adequate sperm supply, is ignored in spite of many articles and discussions pointing out the necessity for study also of the male. It has been my belief that the laity is becoming cognizant of this necessity more rapidly than is the profession.

Any program for investigation and management of this problem must be based on the knowledge of the requirements for, and the control of conception. The basic requirements are an adequate sperm supply, normal pelvic viscera with patent oviducts, and an ovum capable of being fertilized. If these requirements are met, the majority of couples will achieve pregnancy. There are certain factors not well understood that prevent conception which will be mentioned later.

When the patient presents herself with the primary complaint of infertility, adequate history as to general health, menses, and surgery is obtained and a complete physical examination is made. If there are no obvious physical causes for her inability to conceive, the patient is given a brief outline as to the procedure to be followed. It is explained that she must devote 12 to 18 months to the problem before she can reasonably expect results. If the patient has not had at least one year of exposure to pregnancy, she is advised about the period of fertility, frequency of sexual activity, and is in general reassured. If, after one year, she has not conceived, the investigation to be outlined is instituted. If the patient is in the latter half of her child bearing period, six months exposure to pregnancy may be considered adequate before instituting the investigation as to possible cause for her infertility. To begin the fertility "workup" the patient must have her husband investigated before any further work is to be done with her.

The investigation of the husband is done by a urologist. This study should consist of a general physical examination and a search for conditions that are thought to reduce fertility. Specifically, a masturbated semen specimen is obtained and examined for the following: volume, viscosity, sperm count per cubic centimenter, percentage of abnormal and dead sperm and motility. Normal figures generally accepted are volume three —five cc, low viscosity after five—10 minutes, 1000,000,000 sperm per cc, with 10 per cent or less abnormal or dead sperm and remain motile approximately four hours without special care except to prevent drying. The generally accepted lower limit of fertility is 60,000,000 sperm per cc or a total number of 180,000,000 sperm per ejaculate. A masturbated specimen is necessary. Condom samples or samples obtained from the vagina post coitus are misleading and unreliable. A single specimen, if in the lower limits of fertility, must not be accepted. More specimens must be examined, especially following rest from sexual activity, before his status can be ascertained. We have observed considerable variation in sperm production in a given male.

If the male is sub-fertile, the basal metabolic rate is determined, and, if low, he is placed on an adequate dose of thyroid

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extract. Thyroid extract when needed is very effective. No other therapy used has resulted in improvement of male fertility. One of the urologists with whom I work on this problem uses large doses of androgen for several months to suppress spermatogenesis. A temporary increase in sperm count occurs when androgen is withdrawn. Our experience with this procedure is too meager to evaluate it. The only treatment we have used in the male with sustained improvement in the sperm count is thyroid extract in those individuals with a mild to moderately severe hypothyroidism.

In the male with azospermia a testicular biopsy may be done to be positive that germinal epithelium is deficient. Permanent occlusion of the spermatic ducts is not common. In our experience azospermia has been associated with atrophy of the geminal epithelium.

The investigation of the female partner is to determine the normalcy of the pelvic viscera and the patency of the fallopian tubes. In addition to the bimanual examination, a hystosalpingogram is done. This, in our opinion, is more desirable than the Rubin test, because the uterine cavity is also well visualized. Unsuspected anomalies may be found which obviate the probability of pregnancy. In addition, the tubes are visualized and their patency or occlusion determined, and, of considerable importance in treatment, the location of the occlusion if present. The discovery by hystosalpingogram of an infantile uterus is quite infrequent. Many patients seen for infertility have been told that they could not become pregnant because they have an infantile uterus. Bimanual examination in this group of patients reveals apparently small uteri but the x-ray generally shows a perfectly normal uterus. Actually, I have yet to find an infantile uterus.

The technique used for the hystosalpingogram is as follows: It is done at the approximate time of ovulation. Lipiodol is the radiopaque medium used. The patient is placed in the lithotomy position on a cystoscopic table, the cervix exposed and grasped with a tenaculum. A cannula, especially made for hystosalpingography, is inserted 2 - 3cm. into the cervical canal and a seal is obtained with the rubber acorn on the cannula tip. The oil is injected slowly with little pressure with an ordinary 10 cc syringe. Four to six cc of oil is adequate to fill the uterus and tubes and allow for spill from the fimbriated end. The smallest volume of oil possible is used lest granulomata form about the oil droplets. Low pressure is of importance to avoid complications. Spasm is also reduced by low pressure injection. This procedure is done without sedation or analgesia of any type. One film is taken immediately following injection of the oil, a second film approximately five minutes later. In approximately 10 per cent of the cases the second film will show spill from the fimbriated end of the tubes. A 12 hour film is taken to confirm the findings of the first two films.

The next problem is to determine that the female partner is ovulating and the approximate time of ovulation. The simplest method is the use of the basal temperature chart. The patient is instructed in obtaining the temperature and properly recording it. A feature of the temperature determination which is felt to be necessary for accurate interpretation is that all temperatures be taken by rectum for a definite time by the clock, usually three minutes, but always the same time each morning. The interpretation of the chart is not always simple. A diphastic curve indicates ovulation but time of ovulation is not always definite in some patients. In these patients, endometrial biopsies or vaginal smears may be indicated.

Both endometrial biopsies and vaginal smears are office procedures. Endometrial biopsies taken early on the first day of menstruation and showing secretory endometrium is evidence that ovulation has taken place. The vaginal smears may be used to determine the date of ovulation. Daily smears are taken beginning on the eighth day of the menstrual cycle until the cells show the changes typical of progestin activity. These changes occur shortly after the ovary begins its production of progestin thus indicating that ovulation has occurred within the 24 hours preceding this change. Ordinarily five to six smears are all that are needed. These latter procedures are seldom necessary, however, as one becomes more familiar with the basal temperature chart.

It has been our experience that the temperature changes are a result of the glandular changes taking place and there is a definite lag between the glandular changes and temperature change. It has been determined by successful inseminations that the ovulation probably occurs about 24 hours prior to the temperature rise on the chart and usually coincides with the temperature drop prior to the marked rise that has been

described as the indication that ovulation occurred on that date. The patient is requested to keep basal temperature charts for two consecutive cycles before they are studied for time of ovulation.

Assuming adequate sperm, patent tubes and normal pelvic viscera, and the wife is ovulating, the couple is advised about the timing of intercourse in relation to ovulation. The female partner must also be instructed to remain in bed quietly for 10 to 15 minutes, preferably for the remainder of the night without a douche. This latter caution may seem to be unnecessary but I have found several of my fertility problems rushing to douche immediately after intercourse because she is "so uncomfortable and doesn't like to be unclean" or something. Couples who are in this group are infertile because of ignorance and surprisingly constitute a fair proportion of patients seeking aid to conceive. Unfortunately, all are not in this situation.

If the problem is in the male with a low fertility rating the instructions are varied slightly. The couple is asked not to have intercourse from the beginning of the menses until the expected date of ovulation and then to have intercourse two times in 12 hours. Usually the night of the ovulation and the following morning. Each time keeping the penis in the vagina until completely flaccid to maintain the sperm in the vagina as long as possible without leakage. The wife is instructed particularly to remain quietly in bed for a minimum of 15 minutes. If no pregnancy results in four to six months with this schedule, insemination using the husband's sperm should be tried.

The experience with husband's sperm insemination is not good although pregnancies do result from this procedure. The technique is simple. A mastubated semen specimen is obtained, allowed to liquify, and injected in the cervical canal with a cannula. A small amount may be injected above the internal os but this usually results in uterine spasm and there is some danger of pelvic infection. The excess semen flowing back from the cervix is caught in the posterior blade of the speculum and the cervix submerged in the semen for five minutes. Mechanical devices such as diaphragms to keep the semen in the vagina have been used but thus far have contributed nothing.

The women with occluded oviducts constitute the largest single group. The location of the occlusion is of great importance. Those closed at the corneal end are least likely to respond to treatment. Those closed at the fimbriated end are most likely to respond.

Many forms of treatment have been used with varying degrees of success. The least successful in all hands is surgery. The best results reported in any hands is 15 per cent. Thus far, the few I have attempted to correct surgically, and all have been incidental to surgery for other indications, have been total failures.

A common method of treatment for tubal occlusion is that devised by Rubin—repeated controlled tubal insufflation. In his hands this has been quite effective. Our results have been much less satisfactory.

The procedure of hystosalpingography has considerable therapeutic value. The high viscosity of the lipiodal is believed to be an important contributing factor. This is particularly true in the secondary sterility group, the so-called "one baby sterility." Too many patients who have tried unsuccessfully to achieve pregnancy for several years, will conceive a short time following this procedure for it to be coincidental. Several patients have failed to menstruate following hystosalpingography and delivered normal children nine months later.

Another method of treatment for tubal occlusion which I feel has great merit is intravaginal heat therapy. By increasing the pelvic circulation with heat many pathological conditions of the tubes will improve sufficiently to allow conception. This is especially true of occlusion. It has been our experience that more is accomplished by intravaginal heat than by electrically induced heat.

The most difficult and discouraging results are obtained with the anovulatory patients, as with the male who has poor spermatogenesis.

If the patient has hypothyroidism to some extent, she may be made to ovulate regularly with thyroid extract. In fact, even those who have normal metabolic rates will improve their basal temperature curve and conceive following small doses of thyroid.

Theoretically, anterior pituitary extracts will induce ovulation. Unfortunately, there are no extracts available that will produce ovulation in the human. Estrogen in the

estrogen deficient patient would be of value though it is difficult to determine estrogen deficiency in the young woman and administration of estrogen has a depressing effect on the pituitary. The same can be said of progesterone.

Chorionic gonadotropin will only produce increased lutein phases of the cycle as has been repeatedly demonstrated. One report I have seen, however, has mentioned that administration of chorionic gonadotropin for five days, doses of 500 units daily, beginning with the 10th day of the cycle has produced pregnancies, in otherwise anovulatory patients, the month following therapy too frequently to be coincidental. We have had too little experience in this to comment.

In general, all investigators in this field believe that thyroid is the only hormone of value in the treatment of anovulatory cycles in the human. However, one still sees patients who have been taking "shots" for a year or more in an attempt to achieve pregnancy. On the basis of the results of those who have extensive experience with these problems it is difficult to understand why we continue to hear reports from patients of such treatment.

I do wish to mention something that I am sure many have experienced. In treating young women for endometriosis with doses of stilbesterol that should suppress ovulation, pregnancy occasionally occurs during the course of such treatment. No rational explanation comes to my mind. Though we have been tempted to try it in some of the more resistant cases, we have not yet done so.

There are at least two other factors in infertility which must be mentioned. I know of no solution nor a sure way to recognize their existence. The first is incompatibility between the ovum and sperm of a given couple. These people are in every way we can determine fertile but they do not have children. Proof that such does exist is that the same couple with different partners will reproduce. The second is the psychological influence in fertility. What part this plays is at the moment impossible to evaluate but it does definitely play a part. The old familiar sterility, adoption, then pregnancy, is well known and must be in large part psychological. Also the couple who finally gives up trying to achive pregnancy then can't seem to stop having children, is also familiar. There is increasing evidence that there is some influence exerted on the pituitary by the hypothalmus to give a definite basis for some psychic control over this problem.

We have tried to outline without too much detail a plan for management for the infertile couple, on the basis of known and generally accepted principles. This is the method we use in practice. The proof of the pudding, so to speak, is in the results and we would like to give you a few figures from our experience with this procedure as outlined.

For the years 1949-1951, inclusive, we saw 111 patients with the primary complaint of inability to conceive. Of this group 17 were seen only once and no follow-up was thus possible. Of the remaining 94, 45 became pregnant. This represents 47.8 per cent of the total and 37 living children. Twelve are due to deliver in the near future, and five patients were pregnant and moved away and no further information about them is available.

There was one child with an imperforate anus who has been successfully treated. No other abnormalities resulted.

Twenty-four patients or 25.5 per cent had some type of tubal occlusion. Twenty-five husbands or 26.6 per cent were sub-fertile or worse.

In summary, we wish to re-emphasize that fertility studies must include both husband and wife. Progress has been made in the past few years to aid these people, but more knowledge of the problem of the infertile male and the anovulating woman must be forthcoming before greater success can be expected.

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THE PATELLA --- BASIC CONSIDERATIONS

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The number of articles written, or discussions held on a certain subject, is usually determined by two factors; first, the general importance of the problem itself, and second, the lack of a wholly satisfactory or generally acceptable solution to that problem. Pathology of the patella is of such interest, and is, as yet, not wholly solved, although many steps have been taken toward its solution in the past 10 years.

Pathology of the patella should be treated only after due consideration of the basic physiological and morphological factors involved. It is the purpose of this discussion to correlate some of this basic information concerning the patella. Proper treatment of each individual case must be kept as a separate problem and certain basic factors will help the surgeon to reach the logical solution in a given situation.

The patella is classified anatomically as a true bone. There is, however, considerable evidence that it is nothing more than a glorified sessamoid. This question of classification may make for interesting discussion but is largely academic in consideration of the role of the patella in the function of the knee joint.

The infant patella consists of a cartilaginous center only. Ossification begins at about two or three years of age and is complete in the 17th or 18th year. The adult patella fits as a disc of bone on the posterior surface of the quadriceps tendon. It measures approximately five centimeters in diameter. The posterior surface is covered by a layer of hyaline cartilage about seven millimeters thick as compared with three millimeters for the femur and four millimeters for the tibia. This cartilaginous face of the patella is divided into two major parts in conformation to the two sides of the femoral furrow through which it rides. It is sub-divided into seven distinct faces; three pairs being shaped to correspond to the three major positions of the patella as it glides over the femoral condyles during flexion and extension. (Figs. 1 and 2) This shaping of the articular face apparently has developed in response to demand. Should it appear desirable to replace a defective patella with an artificial one, it would be reasonable to expect such a prosthesis to conform to use a material for this prosthesis which has some degree of elasticity, such as nylon, in order to minimize trauma to the femoral articular surfaces. None such is as yet available.

Animal studies have established certain interesting factors which are of practical value when applied to the human. Slow moving species of mammals tend to have large patellae, while the more active species have small or absent patellae. This characteristic is true of the species but does not vary with individuals within the species. For example, a kangaroo has a massive quadriceps with no trace of patella; the two-toed sloth is noted for his sluggish movement and has a very large patella. It does not follow that removal of the patella would speed up the activities of the sloth or make him a more active and efficient creature. By the same token, removal of the patella from a normal knee could not be expected to improve the efficiency of the knee. One should not seriously consider advocating removal of a normal patella, although certain well qualified writers have suggested that improved function might be the result.

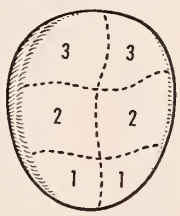
Experimental investigation of the patellar function in the knee has offered considerable information, some of which appears to be misleading and much of which is conflicting. As is usually the case, clinical investigation has of necessity lagged behind in some of its concepts, since it is difficult to prepare alternate series of cases reproducing the same conditions. Recently, however, various reports of clinical material have added much to the sum of our knowledge as to the function of the patella and the residual function of the knee following its removal. Although correlation of laboratory and clinical results is, at present, insufficient, there have been sufficient reports by capable observers to indicate that clinical and laboratory results are not always parallel, and that what may appear to be ideal as a result of work on laboratory animals and on cadavers and anatomical specimens may not necessarily be directly applicable to the human being.

The mechanical role of the patella has remained obscure and controversial. All agree that it serves as a protector of the

femur, and indirectly the tibia and quadriceps tendon. Examination of the knee of a person who kneels a great deal, will reveal callouses over the anterior tibial tubercle and often over the inferior margin of the patella. Additional evidence of this weight bearing function is the occurrence of prepatellar bursitis in the scrub woman or the miner. After patellectomy, some patients may develop tenderness over the patellar tubercle of the tibia, indicating an increase of weight bearing in this area because of the lack of the patella. These observations would seem to indicate that the patella and the patellar tubercle of the tibia share the load in many kneeling positions. That the patella serves as a bumper and protector of the femoral condyles is an experience common and painful to us all. Moreover, it is much better suited to receive direct blows than is the articular face of the femoral condyles. It may serve as a protector to the quadriceps tendon in its gliding across the femoral surface and, in fact, may originate in demand to this need for protection.

In the extensor mechanism of the knee, the patella has variously been described as a pulley, a gear-box, or a lever. Actually, it seems to share certain similarities to several mechanical principles. Normally, the smooth cartilaginous surfaces shift the direction of force at an angle with a little loss of power. When there is interference with this gliding ability, by roughness or irregularity of the under surface of the patella, power is lost but as the degree of extension at the knee approaches 180°, this loss of power actually increases at a greater rate with a roughened patella than a normal one, although it would seem that there is distinctly less pressure of rough surfaces as the extended position is reached. Recent clinical work by the authors has shown that there is uniformly more loss of strength following patellectomy as extension is reached. The patella is most missed at 180°, where its leverage factor would seem to be the least. Pain, rather than strength, is the important factor in the calacic knee. This pain is much more severe in the flexed position as the rough surfaces as forcibly pressed together and rubbed across the other and is often completely relieved by patellectomy.

The lever action of the patella is only part of the general lever mechanism of the entire knee joint. There is in effect in the knee, a double "Jack-spar" leverage action. This mechanism exists due to the location of the axis of rotation of the knee joint posterior to the longitudinal axis of the shafts of the tibia and femur, thus, in effect creating an eccentric motion and permitting the leverage action previously mentioned. There are two major "spars" evident. The first reaches from the femoral rotation axis of the knee to the patella; and the second, from the same femoral axis to the tibial tubercle. (Fig. 3)



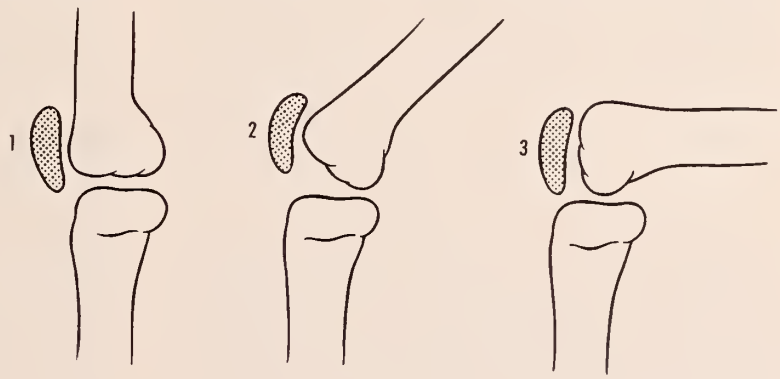
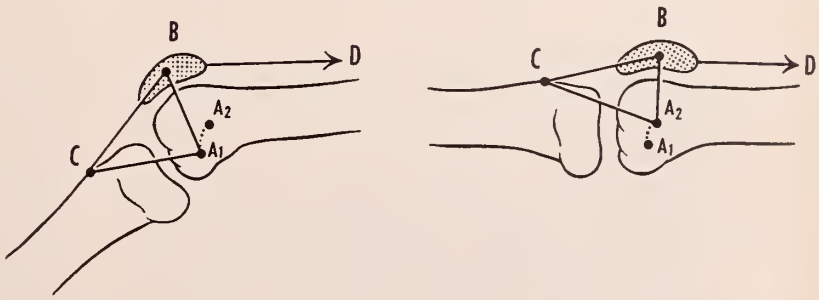


FIGURE 1. Showing divisions of the articular face of the patella; the numbers 1, 2, and 3 indicate the portion in contact with the femur at the positions as shown in figure 2.

FIGURE 2. Showing the contact of various portions of the patella with the femur at 180°, 135°, and 90°.

FIGURE 3. As the knee is extended A_1B loses its advantage and is replaced by A_2C. (A_1B is the primary spar. A_2C is the secondary spar, BC represents the tibial-femoral force line, BD represents the quadriceps force line.)



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It should be noted that the femoral axis shifts anteriorly as the knee is extended. The shift of leverage from the first to the second spar allows maintenance of the mechanical advantage throughout extension. The patella serves as the anterior end of the primary spar and is responsible for about 35 per cent of its length at 90° flexion, but for only about 15 per cent of its length at 135° flexion. This advantage is offset by two factors: one, as extension increases past 135°, the patellar spar decreases in its function and is essentially zero when complete extension is reached; second, with removal of the patella, the angle of force is more obtuse with increased mechanical advantage.

DISCUSSION

In the athlete, the manual worker and the person exposed to the trauma of falling on the knee, the patella is an important protector of the knee joint. Preservation of this function may enable the individual to continue the work best suited to his abilities. It it is necessary to sacrifice the patella in such an individual, it might be advisable to consider its replacement by a suitable prosthesis provided that certain criteria can be met in regard to elasticity, lack of reaction in tissue and so forth. It would seem that these criteria have not been adequately met by any replacement yet available for the patella. Although the patella normally aids in extension by virtue of its gliding ability, when its articular surface is roughened or scarred it becomes a liability and greatly hinders the transmission of force at the knee joint. The fact that the so-called lever mechanism of the patella would seem to be most important in the flexed position, would appear to indicate that this should be the position where the greatest weakness should be felt following its removal. This has been proved by clinical investigation to be not the case, indicating that the lever mechanism of the patella is not essential to good strong and active utilization of the quadriceps muscle. This may well be the result of the tremendous reserve power in the quadriceps muscle. Excision of the patella does not greatly diminish the functional strength of the knee. Loss of strength following patellectomy is due primarily to physiological defects rather than mechanical defects. Rehabilitation demands judicious surgery, a proper mental attitude on the part of both the patient and surgeon, and suitable physical therapy.

SUMMARY

1. The normal patella is an important part of the knee joint and should not be sacrificed as a matter of convenience to the surgeon.

2. The abnormal patella is a liability and should be removed if normal or near normal gliding surfaces cannot be obtained.

There is as yet no available prosthesis adequately replacing the patella and suitable for general use.

4. The mechanical role of the patella in extension of the knee joint is of little importance when a patellectomy is indicated for other reasons.

One need for fear a critical diminution in strength of the quadriceps function following removal of the patella.

News From Oklahoma Defense Blood Center

J. R. B. BRANCH, M.D., DIRECTOR

Regardless of what happens in Korea or has happened since this was written, the need for blood for the Armed Forces will continue for months to come. The Oklahoma Defense Blood Center so far has been meeting its share of this, and averaged from Nov. 1 through April a little over 4,000 pints a month. The total as of April 30 was 24,098. Of this, 7,254 pints were collected in Oklahoma County, and 16,844 pints in the 36 participating chapters throughout the state. Seventy operations in Oklahoma County, and 131 in the other 36 chapters, were conducted. The largest amounts of blood taken in one day were at Claremore on April 15, 313 pints, and Pryor on April 16, 304 pints, when we set up both mobile units.

As mentioned in a previous report, a part of this goes as whole blood direct to Korea. The balance is processed into plasma, and distributed whenever needed by the Armed Forces. We are proud of the fact that though the Oklahoma Defense Blood Center is the youngest in the Midwestern Area, it ranks third of the 15 in the amount of blood sent to Korea. This has been made possible through the support of the general public and the enthusiastic work of the large number of Red Cross Volunteers in recruiting donors and assisting at the operations. We are also grateful for the great assistance we have had from the medical profession.

County Medical Societies have already appointed Medical Advisory Committees to work with the local Red Cross Chapters. Not only have they backed the Blood Program in general, but have actively participated in recruiting donors and giving medical coverage during operations of our mobile units. Local nurses and laboratory technicians have likewise responded and given invaluable help.

In addition to carrying on our regular day in and day out work, we have been asked to train nurses for other centers, an honor never before given to a center so young.

RECENT ADVANCES IN SURGERY

A. RAY WILEY, M.D., F.A.C.S.., F.I.C.S.

TULSA, OKLAHOMA

Whether a recent development is new or not is relative. To appreciate recent advances one must know the trends in surgery and what has led up to any new advance. These trends are not only interesting but they often point the way so that one can, in a measure, anticipate future developments.

As a group the neuro-surgeons are always finding new techniques and improving old techniques. This is to their credit. Arteriograms were being made 25 years ago, but have only recently come into their own. The localization of cerebral lesions, tumors, aneurysms, thrombosis, and ruptured vessels are difficult problems. The risk of air injections and the subsequent prolonged distress in many cases discouraged this method, although it's use was a definite advance when it was introduced. Arteriograms are particularly useful in vascular lesions. With the use of the Sanchez-Perez rapid x-ray cassette changer, many more of these lesions can now be identified, especially basalar aneurysm. (Courville report findings .3 per cent basal aneurism in 30 thousand autopsies.)

Another step in improving localization is the use of fluorescein. By injecting five c.c. of a 20 per cent solution of sodium fluorescein at the beginning of the operation, a neoplasm can be better outlined. Fluorescein has an affinity for neoplastic tissue. A source of ultra violet light and a Wood's filter is necessary. As a further step in localization, but still in the research field, is to tag the sodium fluorescein with radio active iodine and checking it with a counter. Positron emiting isotopes are also being used. All of this broadens the field of neurosurgery.

We are all acquainted with the work of Freeman in introducing the lobotomy and the work of Moniz with leukotomy. These techniques were later improved by topectomies and thalamotomies. In certain cases where shock therapy fails or is not indicated, often lobotomy can be extremely useful. These operations have been a big boon in relieving some of the cases of compulsion neurosis, some maniac depressive and also in some cases of intractable pain. Now with the new stereotaxic instrument devised by Horsley and Clark for animal experimentation only, and later one by Hayne and Stowell, the first one used on man, small lesions in the thalamus can be directly attacked and accurate lobotomies can be done with a minimum of danger.

The field of peripheral neurosurgery, particularly of the sympathetics, is not new but is now opening up into broader fields. Although, for years we have used sympathectomies for the relief of certain types of hypertension, for vascular dilatation and the relief of pain in certain conditions, the new view is not only these uses, but using them to control or modify the physiology of certain organs by attack of their sympathetic. The blocking of the sympathetics in acute pancreatitis is just one example.

In thyroid surgery the whole picture has been changed by the introduction of antithyroid drugs and by the use of radio active iodine. Out of this has grown a better knowledge of the management of these in connection with surgery. Hyperthyroidism, either the diffuse toxic type or the nodular toxic type are considered here. The patient with diffuse toxic thyroid under the age of 50 years will usually respond to the use of propylthyurourcil. If this is not effective or can not be tolerated radio active iodine should be the next step. The ultimate matter of surgery in these cases must rest on the judgment of the surgeon as to the response of these drugs and prognosis of the treatment.

Most surgeons feel that surgery is preferable, especially in the patient under 50. Our attitude of the nodular toxic type is more emphatic. These cases are all candidates for surgery as soon as they can be "cooled" either with antithyroid drugs or radio active iodine. This later is, as a rule, not so effective in the nodular type. The nodular goiter usually occur in the older age group of pa-

tient, complicated by other conditions or diseases. They are more difficult to deal with. No fast and dogmatic rule can be applied to any group of thyroid patients. Thyroid adenomas and Hashamoto's disease calls for thyroidectomy, regardless of B.M.R. present. We no longer shell out the adenoma for too often it is multiple and there is the possibility of leaving a potential source of cancer.

In cardio-vascular surgery, the efforts of the earlier investigators of the past decade have been crowned by successful corrective and curative procedures in the application of their ideas in the human. The exact anatomico-pathologic diagnosis is no longer one of purely academic importance, since during the last decade, hundreds of patients with cardiac and great vessel lesions have been successfully operated and restored to normal health or greatly improved. Essentially these patients can be divided into two groups, those with cyanosis and those without cyanosis. The acyanotic group is composed of those with patent ductus arteriosis, coarctation of the aorta, congenital vascular rings, and a few other less common conditions. The cyanotic group consists chiefly of those lesions associated with stenosis of the pulmonary artery. The first ligation of a patent ductus arteriosis was done by Gross in 1939. Hundreds have been operated since then and many cardiac cripples have been rehabilitated. The patent ductus can be dealt with in two ways. It can be tied, in continuity with two sutures with a transfixing suture in between, (Blalock). It can be clamped, divided and each end sutured individually. (Gross). Simple tying of the duct carries about 10 per cent reoccurence; tying and transfixing suturing about four per cent reoccurence. The optimal age period to operate the patent ductus, patient is between the age of six and 16 years. Rarely ever should they be operated before first year of life. The ductus may close in this period. In tetrology better at six to seven years of age. Earlier if necessary.

There are two types of coarctation of the aorta, the infantile and the adult. There are three common methods of treating this condition. Either an anastomosis of the subclavian artery to the distal aorta, with or without resection of the coarctated area; resection of the coarctated area and an end to end anastomosis, or resection of the coarctated area and replacement of the defect with an arterial graft. In many respects, the most distressing type of congenital heart diseases are those associated with cyanosis. Probably the largest single group of these anomolies is the so called "Tetrology of Fallot." The four features which constitute the tetrology are pulmonary stenosis, dextra position of the aorta, a defect of the ventricular septum, and a right ventricular hypertrophy. The only improvement surgical intenvention can offer is to increase the flow of blood thru the pulmonary artery. This can be either by anastomosing the pulmonary artery to one of the peripherial systemic vessels, such as the subclavian or innominate artery, or by anastomosing the pulmonary directly to the decending aorta. In this way systemic arterial blood, which is desaturated, is made to flow to the pulmonary tree and be reoxygenated.

The most common operative intracardiac procedure done today is commissurotomy. It consists of dividing the scarred cardiac valves along their normal fissure lines. This may be accomplished by insertion of the operator finger thru the scarred "fish-mouth" mitral valve and fracturing the calcified valves, or by division of the scarred valve by use of a special commissurotomy knife that fits onto the finger. In the experimental animal work it is possible to by-pass the heart with a mechnical heart or to use a double transfusion connection with another animal. This allows longer time and more accurate intracardiac surgery. It may open up another field of cardiac surgery.

In abdominal surgery our first thought is apt to turn to vagotomies. Any discussion of recent advance of surgery should include some discussion of vagotomy. While the cutting of the vagus nerves is not new, the work of Dragstedt has renewed considerable interest and it is now finding its rightful place in the armamentarium of the surgeon. Of the scores of recent articles about vagotomies, it appears that the general feeling is that this procedure is indicated in the following situations: 1. In all patients with a marginal ulcer or anastomotic ulcer occurring in a former resection of the stomach or a former gastro-enterostomy. It should always be combined with a gastro-enterostomy, not just a vagotomy alone. 2. It is indicated in a patient with non-malignant extensive doudenal ulcer associated with extensive edema about the doudenum and adjacent organs or tissues, especially if these tissues are dangerously friable for resection and ligation. 3. In the poor risk

patient where a vagotomy and simple gastrojejunostomy would be tolerated but an extensive gastric resection would not be. The final and true evaluation of the use of the vagotomy will, probably, take some years yet. Its final effect on the liver, the pancreas, spleen and intestinal tract has not yet been fully determined. All the information I have indicates in cases of duodenal ulcer that the final end results in five years or more are better with gastric resection than in vagotomosis or a post coloic anastomosis is better. lower in vagotomies. In general I have been better pleased with gastric resections than vagotomies. The cases that have disappointed me in gastric resection I now feel were due to too little resection of stomach tissue and subsequent marginal ulcers. In these that I have reoperated I have been doing a more extensive resection and a vagotomy. This brings up the point of amount of gastric tissue to resect. It is now generally agreed that 75 to 80 per cent of the stomach should be resected to get satisfactory permanent results in duodenal ulcers. There is still argument as to whether an antecoloic anastomsis or a post poloic anastomosis is better. My results are better with the antecolic type. It was felt that a long proximal loop should be avoided, and this is true.

To obtain a short antecolic loop the peritoneum supporting the ligament of Treitz can be severed. This mobilized the duodenal-jejunal junction and allows a shorter upswing of the loop. Then by splitting the omentum up to the transverse, gastricepiploicas, blood vessels a loop from five to seven centimeters can ordinarily be obtained. In extensive gastric resection, where little stomach tissue is left and the line of anastomosis cannot be in the mesentery, and a posterior loop is used, a double loop of the jejuneum has to be brought thru the mesentery, up to the stomach. This has caused a construction about the jejunal loops. This is one reason why an antecoloic anastomosis is preferred.

The crushing of the left-phrenic nerve in association with vagal resection plus gastroenterostomy is now coming into the literature. The crushing is done at the sclenus anticus level. The phrenic crushing is done to counter-act some of the undesirable side actions of the vagotomy. Apparently this is accomplished but the number of cases to date are too small to draw any conclusions.

Biliary tract surgery has been very much in the limelight recently. It is now generally felt that the presence of gall bladder stones associated with or without jaundice was definite indication for common duct exploration. This adds about one per cent more to the mortality rate, when the duct is explored. The chance of stricture following common duct exploration cannot be overlooked, although most such strictures are caused by technical errors in tying off the cystic duct. Trauma from common duct exploration can and in the hands of the careless operator does cause stricture. A stricture always presents a problem. This is mainly due to the fact that, while most every thing has been used as a splice or substitute for the common duct no completely adequate substitute tissue or material has been found. In any repair the average time for reoccurence of the stricture is about five years. The results of all of this is to re-evaluate and revive common duct surgery. In the recent past and at present, in the hands of several operators, cholangiograms are made, AFTER the T-tube has been placed. This is contrast to the thinking that if cholangiograms could be made before any dissection and manipulation were done that scattered stones could be better localized. With this thought in mind intravenous injections of 20 per cent solution of sodium fluorescein has been made just before surgery. When the abdomen is opened and the entire biliary tract is visualized, even some intra-hepatic stones located. Those using this have very favorably reported on it. I have not used it. The difficulty in its use is that it requires a darkened operating room, a source of ultra violet light and a Wood's filter. Repeated looks are time consuming. I use the technique of injecting diodrast or lipiodal into the common duct as soon as the fundus is brought into view. Diodrast is somewhat less irritating than lipiodal. The common duct is aspirated anl filled with the diodrast. If the cystic duct is open the gall bladder biliary tract fills. An x-ray tunnel cassett is placed under thet patient before draping. A good cholangiogram is then secured andn viewed. Valuable information is thus obtained in locating stones or obstructed areas. This information can help, if for any reason it is felt that the gall bladder or a portion of it should be preserved to by-pass the bile to the duodenum or anywhere in the jejuneum, for example, should one find the head of the pancreas and the doudenum needed resection for a malignancy. The

transduodenal approach to the lower end of the common duct has been avoided rather scrupulously in the past, on account of creating a remaining fistula or other complication. The pendulum is now swinging back to more use of this opening. Better operative preparation and better post operative care has made this possible.

There has been some new development in surgery for portal hypertension or cirrhosis of the liver. In the past we have tried to relieve this by portal-caval shunts or by spleno-renal vein shunts. The portal-caval shunts by means of a Eck's fistula is difficult in the human. The spleno-renal shunt is frought with failure thru the difficulty of dissecting the splenic vein, especially if it runs thru the tail of the pancreas. The number of thrombosis occuring in the procedure has been discouraging. None of these procedure get at the real cause of the trouble. It has become evident that the real mechanism of portal hypertension is that the changes in the liver due to the cirrhosis produces a build up of the arterial pressure thru the sinuses of the liver, allowing the arterial pressure to produce a back pressure into the venous system. This also caused a development of the collateral arterial circulation. Berman of Indianapolis reasoned that if the arterial pressure to the liver could be reduced this would reduce the portal hypertension. He tied off the hepatic artery and the splenic artery as close to the celiac axis as possible but not the axis. In a personal communication he says, "Hepatic ligation is not as easy operation but it is definitely less hazardous than the portacaval shunt or the splenorenal shunt because it is technically easier and the chance for complication is certainly less. The collateral circulation in a cirrhotic is actually better developed insofar as the liver and the stomach and the spleen are concerned. This has been made apparent to us because recently I have been ligating not only the hepatic and the splenic arteries but also the left gastric artery. The pressure in the coronary vein is reduced after ligation of this vessel. If it were not for the collateral circulation in the stomach certainly this would not be a feasible procedure, although I am aware that this form of devascularization may be done even in the normal stomach. A preoperative determination of the collateral circulation could be made but we have not deemed it necessary or advisable. The point of election for ligation of the hepatic and the splenic arteries is as close to the celiac axis as possible but not around the celiac artery. We believe that the collateral circulation is best stimulated at a point approximately one to one and a half centimeters from the celiac artery. We have had no cases of massive liver necrosis. In our experimental work we found that the closer we came to the liver in our ligation, the greater was the possibility of hepatic necrosis. I am sure, however, that occasionally a case of hepatic necrosis will occur, even though the ligations are made at the point of election. At present I am convinced that ligation of the hepatic, the splenic and the left gastric arteries offers more for the advanced cases of portal cirrhosis with bleeding varces and ascites than any other procedure with which I am familiar." (J. K. Berman).

Acute cholecystitis can present some serious diagnostic and operative problems. It is generally agreed now that all acute cholecystis cases should be operated as soon as fluid balance and blood needs are corrected. A paravertebral novocain block can be very comforting to the patient but must not lead one into a sense of security that is false. The operation of choice is cholecystectomy. But one must remember that the ligation of the cystic duct and particularly the cystic artery must be made on live, viable tissues that will withstand ligation. In about 20 per cent of acute cholecystitis patients, drainage only can be made. It is better to operate them within the first 18 hours of onset, if possible. However any delay is hazardous. Acute pancreatitis produces an acute abdomen but is no longer an indication for opening the abdomen. If a mistake has been made and the abdomen is opened and a diagnosis of acute pancreatitis is made and you are accustomed to doing vagotomies, this may be made but nothing else at that time. Of course the tip off before surgery is an elevated serum amylase. This occurs early and usually disappears in a matter of hours or a day or so. Also, there can be an elevation of serum amylase in acute cholecystitis. The treatment of choice in acute pancreatitis is paravertebral or sympathetic block. The right side should be blocked first. This is more apt to relax the major pancreatic ducts. If this does not sufficiently relieve the patient and no serious shock has occurred, then the left side is blocked. Demoral and atrophine are used. Morphine can cause a spasm of the sphincter of Oddi and should not be used. If these methods do not relieve

the pain then a spinal-block anesthesia should be used, either using the continuous or intermittent technique. In 1945 Kernitz isolated a crystallin protein from soybean meal that was active in the inhabition of the proleotytic action of trypsin. It was given the name of S.B.I. Since there is increased proteolytic activity of serum in acute hemorrhage pancreatitis Rush and Clifton (Yale University) have used this (S.B.I.) in experimental acute pancreatitis produced in dogs. It inhabited the tryptic proteolytic action and raised the antiproteolytic titer of the dog's serum. It also acted as a powerful blood anticoagulant. It seems possible that some form of this product may be made available in the therapy of acute pancreatitis.

In cancer surgery there is more and more a tendency for the surgeon to do wider excision. It is true that mutilating operations should be avoided if possible but it has become apparent that in many cases only wide incision can be of value and that cancer surgery is no place for compromise and that it is no place for the timid surgeon. We used to think that the Weirtheim operation was extensive. Now observe the work of Meigs, Brunswick, Pack, Wangenstein and many others. Brunswick reported last fall on 100 cases in which he had removed all the pelvic viscera, including the colon, the rectum, the bladder and vagina and in some cases the vulva. They had received all possible irradiation therapy and were considered hopeless patients. He has 17 survivals, four being four year survivals. Such operations as removal of all of the stomach, all the pancreas, all the doudenum, the transverse colon en bloc are being reported. The removal of the os innominate with the lower extremity for cancer of the femur should be placed in this class. Such procedure shows the trends in cancer surgery at this time. I am very much interested in what Dr. Harrell Dodson is doing. That is, in total gastrectomies, he is transplanting the cecum into the position of the stomach to substitute for this organ. I hope that he will report on this work soon. Another interesting development is Doctor Wangensteen's idea of a "second look." Although the patient may be symptomless at the end of six months after some abdominal surgery for malignancy, he reopens at this time for a "second look." This will be interesting to follow. It may be worthwhile.

This does not cover all recent advances, but I hope gives some ideas of the many new ideas annd changes taking place. Surgery is still on the march. Someone has suggested that maybe we should put a ticker tape in our office to keep up to date, lest in the morning we would be outmoded!

Minutes Of House Of Delegates

Complete minutes of the First Session of the House of Delegates held Sunday, May 18, will appear in the August issue. Minutes of the Second Session will run in the September edition of the Journal. Physicians who did not attend the House of Delegates are especially urged to read the transactions of the House of Delegates.

Therapeutic Conference*

The University of Oklahoma School of Medicine
Presented by the Department of Pharmacology

Peripheral Vascular Diseases

EDGAR W. YOUNG, M.D. (M.C. USAF), JOHN POWERS WOLFF, M.D.,
AND PAUL W. SMITH, PH.D.

DOCTOR SMITH: The therapeutic conference today deals with the management of certain of the more frequently encountered peripheral vascular diseases. I have asked Doctor Wolff and Doctor Young to participate in this conference because of Doctor Wolff's wide experience with peripheral vascular diseases, and because Doctor Young has for some time had a special interest in certain phases of management of such conditions. In his present position as a flight surgeon, Doctor Young is also keenly aware of the necessity of adequate peripheral circulation in the personnel who pilot modern aircraft. The condition which is most frequently encountered in general practice, and constitutes therefore one of the most serious problems for the general practitioner, is the obliterative change which comes on as a result of arteriosclerosis. Various types of management of this condition are available; physical therapy, drug therapy, or surgical procedures, each of which has merit under the proper circumstances. I am asking Doctor Wolff to start the discussion this afternoon by dealing with the management of the obstruction encountered in arteriosclerosis.

DOCTOR WOLFF: The condition to which we are referring is arteriosclerosis obliterans, which occurs in the leg, in the patient of middle age or older. We see a reduced arterial blood supply which gradually interferes with circulation until some accident causes a sudden further impairment. Trauma, cold and exposure are the principle inciting causes. The trauma may consist only of a sudden and extreme flexing of the leg, or violent or unaccustomed exercise may bring on an obstructive crisis. Since the general course of the disease is characterized by a slowing down of the blood stream in the arterial system, plaques may fragment in the artery and precipitate thrombosis; I like to use the term in these cases, "thrombosis of the leg." I should like to refer you to a very excellent monograph by Edward A. Edwards, entitled *Thrombosis in Arteriosclerosis of the Lower Extremities*. Following the occurrence of thrombosis, there is secondard spasm, and the patient comes in with a cold leg. The first thing to do of course, is to reduce the spasm in the arterial system of the leg if that is possible. For this we can use a general vasolidator, but we prefer to use localized vasodilation and I think the best way to do this initially is with paravertebral block, which inhibits vasoconstriction. Then we must prevent the extension of the thrombosis in the vascular bed. This occurs not only in the arteries, but in the arterioles, capillaries or any part of the vascular system. If we cannot reverse this occlusion fairly quickly, gangrene ensues and the leg will be lost. Therefore, after we have allayed the construction, either with a generalized vasodilator, or better with a localized blocking of the sympathetics, we use an anti-coagulant drug. Any of the anticoagulants can be used, but I prefer heparin, given intravenously every four hours in 50 mg. doses. Repository heparin given subcutaneously, can also be used, after which, in either case, dicumarol is begun for prolonged inhibition of coagulation. After the leg has become warm, indicating restoration of a fairly adequate circulation, we can discharge the patient, or a sympathectomy can be done to prevent a recurrence of spasm.

DOCTOR SMITH: Doctor Young has been dealing, for the past year or more, with a rather select group of personnel in an Air Force Base Installation. I should like for him to say something about the likelihood of

*This report represents the recording of a Therapeutic Conference held in the auditorium of the University of Oklahoma School of Medicine. These conferences are held each Monday at 4:00 P.M. and are attended by the upper classmen in the School of Medicine, interns, residents, and other physicians. Any physician is welcome to attend and participate. The conferences are conducted under the sponsorship of the Department of Pharmacology.

encountering such a condition as this among such a selected group.

DOCTOR YOUNG: Doctor Wolff mentioned that this disease is fundamentally one of middle age and over. Since in the Armed Forces we are dealing primarily with younger people, we don't see much of it. Of course some of the individuals do drift into this age group and the problem becomes one of management of the chronic arteriosclerotic. In other words, how long can a man be maintained in a condition which will allow him to do his job in military service? This has its application in civilian practice as well. If, as some have advised, a man's work must be interrupted by bed rest to prevent serious complications, there is a tremendous economic strain on that individual. Therefore, the day to day management of these cases is quite important. I should like to proceed a bit further with what Doctor Wolff has said. After you discharge the patient, you must maintain general health, as with any disease. From the short time that I have been seeing patients, I have come to believe that the obese individual, who prefers to lie down until the urge for exercise passes on, becomes a major problem because modified exercise is important. After the individual is out of bed and is no longer having pain in his legs from intermittent claudication, regulated exercise should be instituted. The patient should be encouraged not just to stand, but to walk. In many monographs dealing with peripheral vascular diseases, it is mentioned frequently that walking indoors is not as beneficial as outdoor exercise. I would not attempt an explanation of this fact. In any event, exercise will maintain what circulation they have, and that is your primary objective because none of us can hope to reverse any damage that has already been done to the arterial system. Intensive research is in progress at the present time, part of it in the Air Force Laboratory, using the ultra-centrifuge to determine the size of lipoid molecules in the blood and their possible relationship to arteriosclerosis. You may remember that a few years ago considerable emphasis was placed on cholesterol and its relationship to arteriosclerosis, but the problem was abandoned when animals were fed high cholesterol diets but did not develop arteriosclerosis. There was a tendency then to say that this could not play a part in the etiology of the disease. Now we seem to be coming back to the view that arteriosclerosis is a metabolic disease in which the mechanism which controls the size of the lipoid aggregates in the blood stream has become defective. A practical method of controlling the size of these lipoid aggregates has not yet emerged from this research, but certainly it is something to watch for in the near future. Now I should like to say a few additional words about the use of anticoagulants. Some physicians, and there is rather sharp division on this point, feel that after the acute stage is over, the administration of anticoagulants should be discontinued. Others feel that the patient should be maintained on anticoagulants. I happen to belong to the second school and believe that if the physician is sufficiently familiar with dicumarol or with repository heparin, these patients can well be maintained without danger to themselves on continued anticoagulant therapy with a good chance of preventing the occurrence of a second acute episode. There are cases, however, in which thrombosis will occur even though the intravascular clotting activity has been depressed to a point which theoretically should prevent thrombosis. This is particularly true in thrombophlebitis migrans and the thrombosis that frequently occurs with Buerger's disease, so we still do not have the answer concerning long range management. Concerning antispasmodic or vasodilator drugs; in a patient who has a well advanced case of arteriosclerosis with obliteration, you are not going to be too successful with the vasodilators, whether you use papaverine, Priscoline, Roniacol, or any of the others that have become available recently. The reason for this lack of success is that reaming out arteriosclerotic plaques is as yet a difficult procedure. However, the vasodilators are of great benefit in preventing the secondary spasm that comes on following a tramautic episode.

DOCTOR WOLFF: I feel that a discussion of this kind is certainly not complete without mention of one very important point. Almost all of these patients, when they have an arteriosclerotic thrombosis of the leg, tend to go home and get into a tub of hot water and see how much heat they can stand on the affected foot or limb. If the patient does that long enough, he will lose his foot, so we must remember that these people do not tolerate heat. We stay away from heat cradles and we avoid elevation. If we use heat, we certainly do not use it at a temperature of more than 100 or 102°F. at the most. Those of you who are now students in the Medical School will see patients of

this kind in the hospital. We get many of these in whom gangrene has already set in in the foot or extremity. The percentage of salvage of these patients is quite low. If we get the patient before gangrene has set in, we can use anticoagulants and we can open up collateral circulatory channels by abolishing the normal vascular tone that is always present in the extremities to allow maintenance of the upright position.

DOCTOR SMITH: There is one question which I should like to ask either Doctor Young or Doctor Wolff. Doctor Young mentioned the matter of controlled exercise in these cases; specifically, outside exercise. Doctor Wolff, what would you say about the relation between exercise and external weather conditions; what about letting these people get out in the cold?

DOCTOR WOLFF: They should avoid cold by all means. The patient with an arteriosclerotic extremity has to avoid becoming chilled, even with regard to his head. He must wear warm, loose, woolen socks, loose shoes, plenty of clothing; preferably several layers. Light outside exercise is probably good, but the patient must stop at the first sign of pain in the extremities. This pain response constitutes a warning that ischemia is threatening or has begun, but I certainly agree with Doctor Young that these patients should have exercise, because we don't like to make complete invalids of them.

DOCTOR YOUNG: Since I have had the opportunity of handling relatively few of these patients, I would like to get Doctor Wolff's comment on one perplexing problem. It is usually very difficult to convince a patient with obliterative arteriosclerosis of the gravity of the disease, and the exact nature of the prognosis, without putting him into such a psychological state that he decides he might just as well go home, throw up his hands, and quit. It is my impression that the patient has a far bigger job in combatting this process than the physician, and his intimate cooperation is necessary. I have so far not been able to strike that fine dividing line between helpful cooperation and extreme discouragement.

DOCTOR WOLFF: I wish I could tell you my approach. Every arteriosclerotic patient has friends or knows someone who has lost a leg, and I strike the only cheerful note that I can to these people by telling them that their disease process is somewhat like that which occurs occasionally in the heart, but I explain that they are fortunate that only their legs are affected. Each of these patients has two legs and can still live, even should they lose one, which is not inevitable with the proper care. The same process occurring in the heart, on the other hand, is likely to result fatally. Most of them feel pretty good if you present it to them in this way.

DOCTOR SMITH: Doctor Wolff, you have mentioned the importance of controlled heat as a method of establishing reflex circulation in the extremity. What is your opinion of the electric blanket as a means of keeping the extremities of these patients warm at night?

DOCTOR WOLFF: In so far as these patients with peripheral vascular occlusion are concerned, I regard the electric blanket as one of the most important and practical developments of recent years. The electric blanket has two important advantages to these people. It keeps them warm without the danger of excessive heat, and it reduces the weight born by the extremities. As a matter of fact I recommend them to my patients without reservations.

DOCTOR SMITH: Doctor Wolff, you have already mentioned the importance of establishing an improved circulation in the acute case as you first see it. I would like for you to go a little more into detail about some of the methods advocated in recent years. I would like for you to discuss reactive hyperemia, produced by occlusion of the arterial system followed by its sudden release; the oscillating bed; contrast baths; alternating positive and negative pressures, and any other physical therapeutic measures which occur to you.

DOCTOR WOLFF: Several years ago we used a machine known as the passive vascular massage machine which produced alternating suction and pressure inside a glass boot, which encased the leg. We found that the pressure of the rubber cuff, which closed the glass boot at the thigh, caused sufficient trauma in the occasional arteriosclerotic, that it really did more harm than good. When I visited one large clinic recently and asked about the use of this device, I found that it had been abandoned as far as arteriosclerotic thrombosis was concerned. It may possibly be of value in other conditions. We have also used contrast foot baths and feel that these are of some value. Instructions are given to the patient in typewritten form, to insure that the patient will not go home and soak his foot in excessively hot or cold water. I frequently amplify these instruc-

tions to suit a particular case. We keep copies of these instructions available at all times in the vascular clinic. Essentially, the directions are that the patient soak his extremities alternately in warm and cool water at temperatures of 100 or 102°F., followed by a period of a few seconds in water at a temperature of 70°. In the severe arteriosclerotic the upper limit of the warm bath is always 100°F. Some patients appear to be benefiitted by this procedure, but I am not certain about the benefit as a general or overall method. The Buerger exercise was formerly used in these patients. It is my feeling that the Buerger exercise usually does more harm than good because holding the leg raised above the bed must certainly increase the oxygen requirements in the muscle. One thing I do tell these people is to straighten their leg out on the bed, lower it to a stool until it turns pink and then raise it again to the bed until it turns white. This exercise they can do without much exertion.

If you doubt that the typical Buerger exercise requires considerable energy, you might try holding your leg high in the air, then lowering it below the level of the bed.

DOCTOR SMITH: Doctor Young has already mentioned the limitations of vasodilator drugs in arteriosclerosis obliterans. There is one aspect of the use of vasodilators which I believe deserves special mention. It is really a very difficult procedure to determine total blood flow in either arm or leg. After the administration of a vasodilator, it is customary to evaluate the increased circulation in a limb by means of the increased surface temperature, or the warmth of the leg. This observation, however, really does not tell us whether the vasodilatation is confined to superficial vessels or is also present in the deeper tissues, including muscle, where it would undoubtedly be of greater benefit. Alcohol, a drug which we have not so far mentioned, would appear to be a case in point. There appears to be little doubt that it is capable of causing superficial vascular dilation, because of the glow or flush it produces and the actual increase in skin temperature. Its activity as a coronary vasodilator has been questioned in recent publications, however, and until further studies are made I would hesitate to make any statement with regard to its effect on the vessels of the deeper tissues of the extremity. It may serve well as a sedative or euphoric agent when administered as a hot toddy at bedtime. It is certainly true that a vasodilator which produces a fall in systemic blood pressure may defeat its own purpose by reducing the net blood flow through the narrowed vascular channels of the affected limb. In the past few years, various workers have attempted to surmount this disadvantage by injecting the drug directly into the arterial system of the extremity with reduced circulation. Doctor Wolff, would you comment on this procedure?

DOCTOR WOLFF: My experience with this method is limited, although I have used papaverine in the femoral artery as advocated by Doctor Irving Wright at Cornell, and it does seem to help a lot in an individual in an acute episode. We do use papaverine intravenously, at times, for the systemic effect of the drug. May I make one other statement at this time? Doctor Young has said that the general health of the patient must be cared for, and this is particularly true in one important regard that has not been mentioned. These patients of middle age and past will often have an anemia. Now this anemia may not show up on the laboratory report, since the blood volume may be reduced. I think we certainly should remember that blood transfusions, even though we are administering an anticoagulant, are sometimes in order. Certainly we should give these people iron if they appear to need it. I would like to ask Doctor Young how he feels about occasionally giving these people blood.

DOCTOR YOUNG: It has been said "if you should destroy all of the doctors armamentarium except blood, he wouldn't be too bad off." Certainly I have seen small blood transfusions produce amazing results in the clinical course of hospital patients. I think that you frequently have to go by "rule of thumb" in this type of anemia, since it is accompanied by a lowered blood volume. Outside of the research laboratory, blood volume studies have not been generally available. During my discussion of the maintenance of general health I neglected to mention one point. The obese patient should be reduced, if possible. But it is essential that the diet should not be so severe that the nutritional balance is disturbed, with the chance of producing just such an anemia as we have mentioned.

DOCTOR SMITH: Up to this point we have discussed mainly the importance of reestablishing circulation in the affected limb. Let us assume now that we see a patient late, after he has developed ulcers or gangrene. What do we do now, Doctor Wolff?

DOCTOR WOLFF: Of course we wish we had seen them sooner. The prognosis is quite serious once gangrene has begun in the extremity and the percentage of salvage begins to be quite a bit lower. We see some patients who lose only one or two toes or areas of skin which can be replaced by grafting, but these are in the minority and we certainly cannot expect to salvage many of these patients without following up the treatment we have mentioned, performing a sympathectomy later. I can certainly count on the fingers of one hand those cases in which we have been able to put skin on an arteriosclerotic ulcer and make it grow. Grafting of ulcers due to arteriolarosclerosis involving only the skin can usually be performed successfully.

DOCTOR SMITH: Doctor Young, would you like to comment on some of the methods of handling arteriosclerotic ulcers? Some new developments in the past few years would appear to make treatment a little less hopeless than before. I am referring now to the antibiotics, and certain local methods of treatment, such as chlorophyll and red blood cell paste.

DOCTOR YOUNG: Frankly, I would like to refer all of these questions to Doctor Wolff. The treatment of this type of gangrene is very difficult because the underlying cause is not an infection but vascular occlusion. Of course, infection does frequently supervene, particularly in the elderly patient, which we see in a hospital such as ours. When antibiotics are used for surface application, the problem of sensitization should always be kept in mind. It is preferable whenever possible to use drugs that one would not expect to use systemically on later occasions; in other words bacitracin, tyrothricin, or chlorophyll. It is going to be interesting to observe the incidence of sensitization to chlorophyll among the innumerable people who are either taking it orally or using it in almost every conceivable type of cosmetic preparation in the interest of insuring constant "social acceptability." Chlorophyll however, has one important property which we should keep in mind. Along with its moderate antibiotic action, it is capable of stimulating fibroblastic activity and will sometimes help to heal these chronic ulcers, or at least reduce the area which must be covered with a graft if that becomes necessary. I am not familiar with any other methods of local treatment which have been definitely proved to be of benefit. To return again to the drugs which are capable of producing vasodilatation upon intraarterial or intravenous injection, there are two that I would like to warn you against. One of these should not be used at all and the other should be used with extreme caution. The one that I think should not be used at all in the arteriosclerotic is Etamon, or tetraethylammonium bromide. The vasodilatation produced by Etamon is so wide spread that the blood pressure falls precipitously. Older people do not stand this drop in blood pressure well, and my personal experience would indicate that Etamon is a drug to avoid in the arteriosclerotic. The drug which I believe should be used with extreme caution is histamine. Although my personal experience is meager, one of its main effects is to produce a headache that is almost intolerable. Another of the distressing side reactions of histamine is the tremendous rise in the level of gastric acidity which it produces. Certainly in the patient with peptic ulcer or gastritis this stimulation of acid secretion is to be avoided. Among the other drugs mentioned, Priscoline has the advantage that it can be administered orally, intravenously, or intramuscularly.

DOCTOR SMITH: We should all bear in mind that we have been talking about arteriosclerosis obliterans, and our statements apply specifically to that condition. The treatment of ulceration of this type where a deficiency of the blood supply is the basis for the original ulceration, is quite different from the treatment of other types of cutaneous ulceration.

We have not mentioned, and we will not have time to discuss, the complications which are present when arteriosclerosis accompanies diabetes. I would like for us to go on now to one of the other frequently encountered peripheral vascular diseases, thromboangitis obliterans. I am asking Doctor Wolff to start our discussion of this type of peripheral vascular disturbance.

DOCTOR WOLFF: Thromboangitis obliterans occurs almost exclusively in the young adult male. Cases have been reported in the female, but these have been so rare that there is reason to doubt the disease is actually thromboangitis obliterans. This disease involves the smaller arteries, usually in the lower extremities. In about 20 per cent of cases the upper extremities are involved, and in rare instances the arteries of the heart, brain, or other regions of the body may be affected. There seems to be a close association between the incidence of the disease and the use of tobacco. Others have reported

cases in non-users of tobacco, but I personally have never seen the disease in a person who has not used tobacco for many years, usually beginning while quite young. It can be stated, as a generalization, that there is an excellent chance of going into remission if tobacco is discontinued, but it seems almost impossible to convince some patients of this fact. If the patient quits tobacco and still has an inadequate circulation, we must resort to the usual methods of therapy in an attempt to improve it. The passive vascular massage apparatus can be used in these cases because the damage does not appear to extend above the knees, and there is not the same likelihood of vascular injury as in arteriosclerosis. We can accomplish the same results by using alternate warm and cool soaks accompanied by modified Buerger's exercise. These patients have to be most careful of the hygiene of the foot, since ingrown toenail or a small lesion beginning between the toes may cause the loss of the foot. There seems to be some dissention as to whether a sympathectomy is indicated in these cases. I believe that if the patient quits tobacco and still has a cool foot, then a sympathectomy is indicated. We still have much to learn about this disease.

DOCTOR SMITH: Although there may still be grounds for argument as to the responsibility of tobacco as the actual cause of thromboangitis obliterans, all authorities agree that its use must be stopped once the disease is established. This prohibition still applies after sympathectomy. Nicotine causes vasoconstriction by stimulation of sympathetic ganglia, and since sympathectomy leaves the ganglia and the postganglionic nerve supply intact, the drug is just as effective after the operation as before. Doctor Young, do you have any comments?

DOCTOR YOUNG: I have nothing to add to the discussion, but I would like to ask Doctor Wolff a question. How do you decide which cases are candidates for sympathectomy? Are there other indications aside from the apparent stage of the disease and the responses to paravertebral block?

DOCTOR WOLFF: If the case is seen early, and if the vascular bed of the affected parts appears to fill normally after tobacco is discontinued, sympathectomy is not recommended. If there still appears to be a vascular insufficiency, we test the response to paravertebral block, we test the response to advise sympathectomy in most cases because they feel that there is always some degree of vascular spasm present, which should be relieved. I believe that final judgment should depend upon the extent to which the disease has involved the extremity. When a patient is reluctant to quit tobacco I tell him that he is smoking up a part of his leg with each cigarette. That may seem cruel, but it is sometimes effective.

DOCTOR SMITH: Raynaud's Syndrome is a disease that affects a wide age group. Doctor Young, would you start the discussion of this condition?

DOCTOR YOUNG: My information about Raynaud's disease is confined to what I have read and heard. It is relatively rare, and is reported to occur in two age brackets, either between the ages of 30 to 40 years or in the decade from 50 to 60. There is apparently no explanation for this age grouping. The disease is characterized by swelling, redness and pain in the extremities, and becomes difficult to manage as it progresses to ulceration. Usually the tips of fingers and toes are affected; less frequently the ear lobes and the tip of the nose. These patients are frequently very cold-sensitive. As to management of these cases, I would prefer to yield to Doctor Wolff:

DOCTOR WOLFF: We can consider the disease under two general classifications. Primary Raynaud's disease affects the extremities symetrically. It may affect all four extremities and, as Doctor Young said, the tip of the nose and other areas as well. Some of these cases occur in women at the menopause; and it is possible that there is a definite relationship between the onset of the disease and the metabolic changes which occur in women at this time.In these patients we use vasodilating drugs, and we try to allay any mental apprehension they may have. We may recommend sypathectomy if an extremity becomes too involved, but this is not as effective in the arm as it is in the leg. The second classification includes a group of conditions which are accompanied by secondary Raynaud's phenomena. One of the most common of these is post-traumatic vasospasm, brought on by continuous exposure to high-frequency mechanical vibrations. Especially susceptible are operators of pneumatic hammers, drills and similar devices. We have seen stone cutters with one hand involved. It sometimes affects piano players. We have a very fast typist here in the city who has secondary Raynaud's in both hands. Allen, Barker and Hines give an excellent discussion of these conditions in their book, *Peripheral Vascular Diseases.*

DOCTOR SMITH: Unless Doctor Young has something to add, I would like for Doctor Wolff to discuss Thrombophlebitis.

DOCTOR WOLFF: I believe that the problems involved in the management of thrombophlebitis are among the most serious ones we encounter. The individual who has had so-called "milk-leg" while still comparatively young and productive, and with a living to make, faces a serious situation for life. I tell these patients that there are many like them who get along quite well, and that their chances are equally good. Now the patient with thrombophlebitis who is seen early and given adequate treatment without delay will recover and have a pretty good leg. Some textbooks still in use are full of references to occlusion of the deep vein as the important aspect of the pathology of thrombophlebitis. This simply is not true. Canalization takes place so rapidly following thrombosis that it is almost impossible to obtain a section of such a vein quickly enough not to show some early recanalization. In the progress of the disease to this stage, however, the wall of the vein is damaged in such a manner that the function of the valves is destroyed. There is also a severe associated vasospasm which involves all of the vessels in the affected extremity. The treatment, therefore, is obvious; further thrombosis must be prevented, and the vascular spasm must be relieved. The means of accomplishing these ends are fairly widely known, but there have been differences of opinion as to the order in which they should be used. It seems to me that the most rational procedure is to relieve the spasm immediately, and the simplest way to do this is with a paravertebral block. We can then use an anticoagulant or any combination of anticoagulants we desire. If it is a severe case, in which immediate action is essential, I use the regimen which has been described previously, consisting of intravenous heparin for its rapid effect, followed by dicumarol for sustained action. If intravenous procaine hydrochloride is used as the vasodilator, the average dose is 4 mg. per kilogram of body weight (usually made up in 0.1 per cent solution) injected very slowly (about 20 minutes for the 280 cc. of the above solution required for a 150 lb. individual). A solution of a barbiturate suitable for intravenous use (usually Pentothal or Nembutal) should, of course, be available to counteract toxic reactions to procaine if encountered. An airway should also be kept at hand. One point that deserves emphasis is that we should avoid needle punctures in the patient who is on anticoagulant drugs. This constitutes an additional argument for performing the paravertebral block before, rather than after beginning anticoagulant therapy. Instances of severe retroperitoneal hemorrhage resulting from performance of paravertebral block after depression of the clotting activity of the blood, have been reported in the literature. Several times in my own experience, in the course of sympathectomy on patients who have been given a paravertebral block after anticoagulant therapy was instituted, I have encountered sizeable hematomas in the retroperitoneal tissues, caused by accidental piercing of small arteries or veins in the process of administering the block. Therefore, if repeated relief from vasospasm becomes necessary after heparin or dicumarol, you must use intravenous procaine hydrochloride or one of the other vasodilators which we have mentioned previously. There is an important phase of the follow-up treatment of these patients; they *must* not be allowed to develop edema. We show them how to wear elastic bandages and they invariably ask how long it should be used. The only answer is that it may be two weeks, two months, two years, or a lifetime. If edema develops, the circulation will become insufficient, resulting in ischemia and eventual ulceration of the leg. In this area we have to use a little different type of pressure bandage than in cooler climates. In the northern states a para-rubber bandage can be used, but from Oklahoma on south, especially in the summertime, we have to use a woven elastic bandage with rubber incorporated, or a woven elastic stocking. Elastic stockings must be renewed frequently because they have a tendency to become loose around the ankles rather suddenly. In summary, whether your patient is going to have a good leg in the future depends directly upon the intelligence with which he co-operates with you in preventing the occurrence of edema.

DOCTOR YOUNG: I would like to indicate my complete agreement with all that Doctor Wolff has said in connection with edema. There is nothing harder to manage than one of these patients who has developed a brawny type of edema. They will have pain and discomfort, and eventually, ulceration. If you get nothing else from this discussion of thrombophlebitis, remember—*don't let edema develop.* Don't depend entirely upon even the most co-operative patient to take care of this entirely by himself. He should be watched and helped. Incidentally, I would

like to mention a new anticoagulant drug which you may expect to see on the market very shortly. I don't know yet what its trade name will be, but it is 4-hydroxy cumarin, No. 63. It is a dicumarol type of drug. It is characterized by a much longer action and by much less toxicity with regard to the production of bleeding from the kidney and from mucous membranes. It should be much easier to use in prolonged, maintenance type of anticoagulant therapy, but I imagine the same precautions would be in order concerning the possibility of bleeding as a result of paravertebral block or other parenteral therapy.

DOCTOR SMITH: We have a little time remaining for questions from the floor.

QUESTION: Will these patients with Buerger's disease actually quit smoking?

DOCTOR WOLFF: I have had some patients who have quit, but some of them won't. I think a lot depends upon the intelligence of the patient. One of our recent patients was a pretty bright young man who had been a pilot in the Army Air Force. Now you know what the definition of a smart man is; the man who agrees with you. Well, he said that about 10 Doctors had told him not to smoke, but one Doctor said it was all right, so he continued to smoke. I saw him lose a second leg. A higher percentage of our private patients will quit than will patients in our own hospital across the street. Of course, anyone can quit smoking. I don't see why it should be harder for these patients than for other people.

DOCTOR YOUNG: I would like to point out that some companies manufacture cigarettes for which they claim a low nicotine content, and others produce so-called "denicotinized" cigarettes. Both these claims are spurious. The Federal Trade Commission has pointed out that it is impossible for any manufacturer to keep the nicotine content of cigarettes uniformly low by any manner of blending of the varieties of tobacco available, although it is true that certain varieties do contain less nicotine than others. Secondly, there is no such thing as a de-nicotininzed cigarette, and the use of such products give a false sense of security. Even the amount of nicotine in the "de-nicotinized" product is sufficient to cause severe spasm. There is one case reported that I recall quite vividly; the individual was persuaded to stop smoking, but decided one day to try a single cigarette. There was an immediate and marked return of his symptoms.

DOCTOR SMITH: Since nicotine has figured rather prominently in our discussion this afternoon, I would like to close this conference by pointing out that it has several peculiar properties which make its systemic effects almost completely unpredictable. I have already mentioned that nicotine stimulates autonomic ganglia. The result is a mixture of sympathetic and parasympathetic (adrenergic and cholingeric) activity, with sympathetic effects predominating in the peripheral tissues (e.g., vasoconstriction) and parasympathetic effects predominating in the viscera. We are all familiar with this picture in the boy who tries his first cigarette; pallor of the skin, rapid heart, and hyperactivity of the gastrointestinal tract with nausea and vomiting. Large doses of nicotine, however, block these same ganglia. It has been shown that subcutaneous injection of the amount of nicotine usually absorbed in smoking two cigarettes (about 0.4 mg.) reduces gastric motility. Thus it would seem that the first dose of nicotine of a series —the first cigarette in the morning for instance, produces the most profound effect. Tolerance to nicotine develops quickly. Experimental animals which are given daily injections of nicotine in gradually increasing doses, are capable within a few weeks of withstanding in a single injection much more than the amount which would initially have been lethal. This would indicate that the victim of a peripheral vascular disease who smokes an occasional cigarette, having allowed his tolerance to disappear, is fully as vulnerable to damage as the "chain smoker."

ROCKY MOUNTAIN SOCIETY HAS MID-SUMMER MEET

The Fourteenth Annual Mid-Summer Conference of the Rocky Mountain Radiological Society will be held in Denver at the Shirley-Savoy Hotel August 7, 8, and 9, 1952.

Approximately 20 well known out of state guest speakers will participate in the program. Round table discussions will be held in connection with luncheon meetings each day. Evening meetings will include a joint session with the Denver Medical Society, followed by a Dutch lunch, and an informal banquet with entertainment. The annual picnic on Saturday afternoon will conclude the conference.

President's Page

About the saddest commentary on the modern state of near chaos is that there are too many men making history who have never read any.

We have no way of judging the future but by the past, and the realistic evaluation of our past experience should enable us to avoid mistakes and pitfalls now.

The Lieutenant saw his bomb load explode on a power plant, blowing it to smithereens, and remarked, "There goes up *my* income tax." This is the realistic approach and he had learned something from current history.

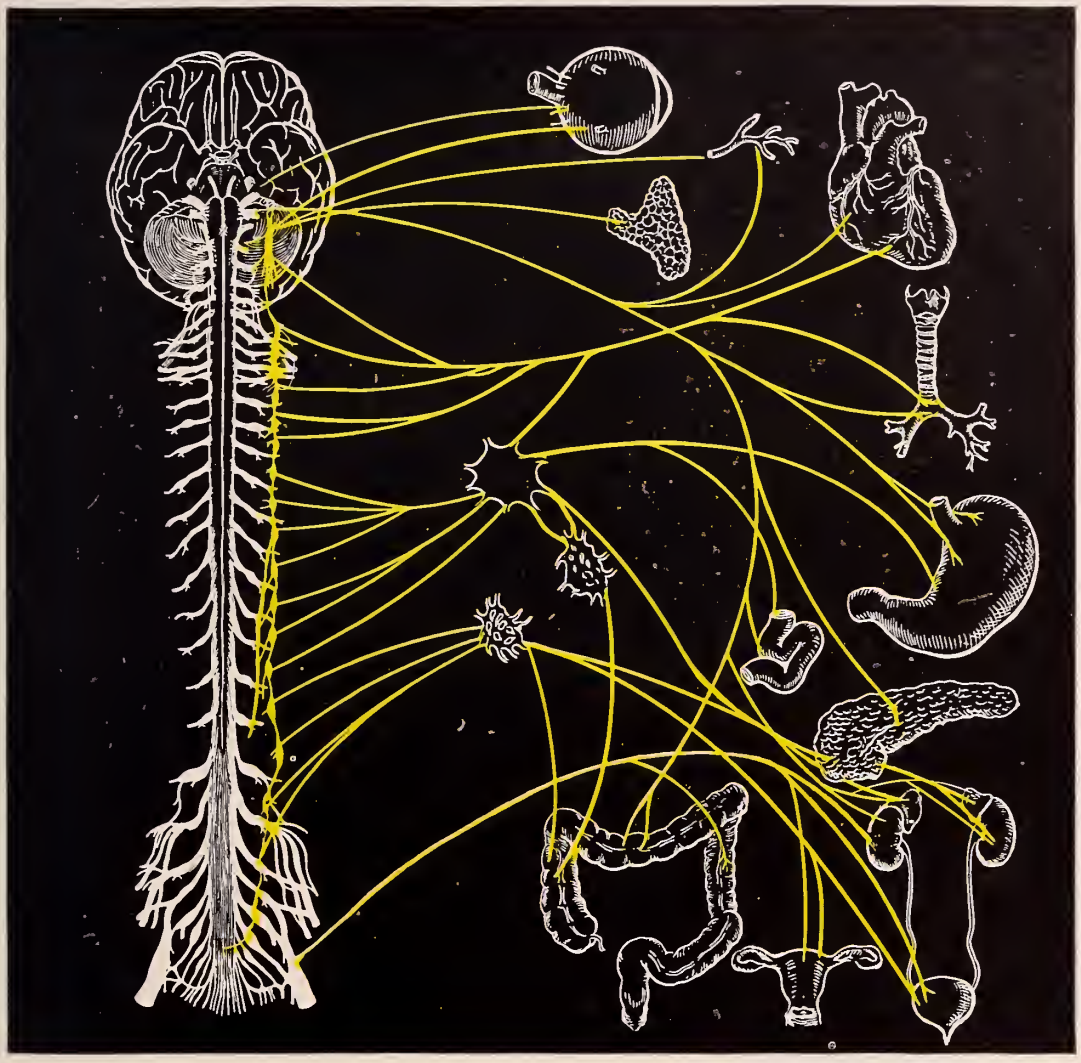
Medical history, too, is worthwhile and is peculiarly inspirational since the lives of interesting people made it. A move has been on foot for a long time for us to assemble and preserve the history of Oklahoma medicine which will be irretrievably lost otherwise. Our council recently acted on the proposal and agreed to underwrite part of the expense.

The chief reason for calling this matter to your attention here is to inform you beforehand that a representative of the council will call on you before long and to urge that you assist him in gathering any historical data, biographical sketches, official documents, or interesting anecdotes that might be used in this work. The older members of our society will especially take note, for it is you who will be able to make the most valuable contributions.

The mule is the only animal that has neither pride of ancestry, nor hope of posterity. We are blessed by having both. Let's keep alive the one that as the other is achieved they may share our common heritage.

Alfred R. Snuggs

President



Excess neural stimulation over the parasympathetic subdivision plays an important role in such clinical conditions as peptic ulcer, certain forms of gastritis, pylorospasm, pancreatitis, spastic colon, bladder spasm and hyperhidrosis.

Banthine® Bromide (brand of methantheline bromide) is a true anticholinergic which inhibits parasympathetic stimuli, acting selectively on the gastrointestinal and genitourinary systems. It exerts little or no influence on the normal cardiovascular system. Banthine is supplied in oral and parenteral dosage forms.

ACCEPTED COUNCIL ON PHARMACY AND CHEMISTRY AMERICAN MEDICAL ASSOCIATION

RESEARCH IN THE SERVICE OF MEDICINE SEARLE

CURRENT ACTIVITIES AT THE OKLAHOMA MEDICAL RESEARCH FOUNDATION

EDWARD C. REIFENSTEIN, JR., M.D.

DIRECTOR, OKLAHOMA MEDICAL RESEARCH FOUNDATION



This is the eighth in a series of monthly articles concerning the activities of the Oklahoma Medical Research Foundation. This article will deal with the program of the laboratories for basic research and training which have been developed at the Oklahoma Medical Research Institute and Hospital.

The laboratories on the north side of the third floor of the Oklahoma Medical Research Institute Building are being devoted to basic research and training under the direction of Dr. Charles D. Kochakian, Associate Director. These laboratories consist of two units containing three laboratories each and already are occupied by seven assistants.

The financial support of the basic research and training program is derived from funds awarded to the Oklahoma Medical Research Foundation and to Doctor Kochakian by the national organization of the American Cancer Society, by the national organization of the American Heart Association, and more recently by the local chapter of the American Heart Association. Another grant has been made by the Cooper Foundation of Nebraska to be used jointly by Doctor Kochakian at the Research Institute and by research workers at the Roscoe B. Jackson Memorial Laboratory at Bar Harbor, Maine. This small grant has permitted the development of a close liaison between the Research Institute and the Roscoe B. Jackson Memorial Laboratory.

The work in these laboratories is concerned for the present with the role of hormones in the regulation of growth processes, and in a continuation of studies in which Doctor Kochakian has pioneered. In general, the studies are concerned with the influence of hormones in metabolic processes and on various enzyme systems, and the metabolism of the androgenic steroid hormones.

The following specific projects are now under investigation:

1. The effect of androgens on oxidative enzyme systems in various tissues is being studied.

2. The factors affecting the metabolism of androgens by the various tissues are being determined and the products formed by metabolism are being isolated.

3. Methods for paper chromatography of androgens are being developed to facilitate studies on the metabolism of steroid hormones.

4. The effect of cortisone and related corticoids on the heart muscle and other tissues is being investigated. This study is especially directed towards a search for factors which cause cortisone under some conditions to be very destructive to heart muscle. The Roscoe B. Jackson Memorial Laboratory under the Cooper Foundation grant is cooperating in this project in providing mice of various pure genetic strains.

5. As a corollary to project Number 4, certain enzyme systems are being studied in various tissues including the heart muscle of the animals that are being treated with cortisone and related corticoids.

6. The relationship of the thyroid gland to metabolic and enzymatic effects of androgens is being studied in rats that have been rendered hypothyroid by surgical removal of their thyroid glands.

7. The efficacy of orally-administered androgens, as judged by organ weights, food intake, and tissue enzyme changes, is now in the process of being evaluated.

8. Further studies on the mechanism of the metabolic effect of the parathyroid hormone have been completed. These studies were carried out in cooperation with two Italian investigators in Milan, Italy, in order to resolve differences in results reported by their laboratory with those from Doctor Kochakian's laboratory. Thus, identical experiments were designed to be carried out independently in the two countries and the results compared.

The fundamental research program will provide opportunities for people in various stages of their training periods to work together for their further advancement. Properly qualified assistants will be permitted to do graduate work at the Oklahoma Medical Research Institute towards the Master of Science or Doctor of Philosophy degrees, conferred by the University of Oklahoma. In addition, arrangements are in progress for a cooperative graduate program with Oklahoma A. and M. College.

At the post-doctorate level, Dr. Thomas C. Smith who received the Ph.D. degree in 1951 in the Biology Department, Harvard University, is working in the basic research and training laboratories. He is obtaining advanced instruction and experience in the field of hormones and oxidative enzymes.

At the graduate level, Mr. Dan Nall, who has an M.S. degree in Chemistry, has completed most of his course work towards the Ph.D. degree in the Chemistry Department at the University of Oklahoma. He is doing his thesis work on "Factors Affecting the Metabolism of Androgens by Tissues." Thus, the cooperative effort between the Research Institute and the Chemistry Department at the University has been initiated. Two of the other assistants, Miss Barbara Ann Reed and Miss Anita Mae Eisheid, are part-time graduate students in the Biochemistry Department at the University of Oklahoma School of Medicine.

In addition, provision has been made through the institutional grant from the American Cancer Society for two research assistantships during the summer months. The appointees for these positions will be chosen from promising students in the University of Oklahoma School of Medicine or from undergraduate students majoring in chemistry and biology, who have already shown an inclination towards biological research. It is the purpose of these summer fellowships to provide an opportunity for the development of the talent of young scientists in this area. In the summer of 1951, three such students were accepted as assistants in the laboratory on a voluntary basis, for at that time no funds were available for salaries. These individuals not only gained considerable experience but proved stimulating to other members of the laboratory staff.

An opportunity for advanced instruction in other laboratories has been instituted. Provisions were made for Doctor Smith to spend a month at the Enzyme Laboratories at the University of Wisconsin School of Medicine for special training in enzyme methods, and for Mr. Nall to visit the Sloan-Kettering Institute for Cancer Research, New York City, for instruction in methods concerned with stroid analyses. This type of particular training will be expanded as funds to finance it become available. At the present time a small sum of money has been made available through the institutional grant awarded by the American Cancer Society.

All of the present participants in the basic research

and training program have taken part in the Biochemistry Seminar. As a result, most of the lectures given this past semester have been delivered by Doctor Kochakian and his assistants. Furthermore, Doctor Kochakian delivered four lectures in the Biochemistry course to the medical students of the University of Oklahoma School of Medicine, and was responsible jointly with Dr. Dale Clark of the Biochemistry Department for two of the graduate seminar courses: (1) Biochemistry of Hormones, and (2) Enzymes.

Thus, in the short space of time since the inception of this portion of the activities of the Oklahoma Medical Research Institute and Hospital, the teaching phase of the basic training program not only has been initiated, but has been integrated, to mutual advantage, with the appropriate departments of the University of Oklahoma. In addition, liaison has been established for training purposes with other institutions. The Oklahoma Medical Research Foundation, therefore, is beginning to fulfill its promise as a center of advanced education in the fields of Medicine and Allied Sciences.

BLUE SHIELD BENEFITS INCREASED; BLUE CROSS RATES RAISED

New membership rates and benefit changes for Oklahoma's Blue Cross Plan will go into effect beginning July 1, Arthur S. Risser, M.D., president of the hospital care Plan's Board of Trustees, announced recently.

The new rates, which become effective July 1, or on the member's first payment thereafter, represent increases in monthly dues ranging from 10 to 20 cents for single persons and from 50 to 60 cents for a family.

N. D. Helland, executive director of Oklahoma Blue Cross and Blue Shield, pointed out that the Blue Cross Plan will increase the private room benefit to $6.00 per day. Otherwise, he said the Plan will continue to provide the same "service" benefits available to Oklahoma Blue Cross members as in the past. The enrollment requirements will remain the same, and members may still retain their membership after reaching the age of 65, when the retire from their place of employment, or when they leave their place of employment.

At the same time, Helland said, the Oklahoma Blue Shield Plan, surgical-medical-obstetrical care companion Plan to Blue Cross, will make some important additions to its benefit schedule. X-Ray therapy and radium therapy benefits for maligant conditions will now be available to Blue Shield members. Payments for these benefits range from $3.00 to a maximum of $150.00. Blue Shield membership rates remain the same.

In announcing the new Blue Cross rates, Helland said the 21 man Board of Trustees, which represent the public, the medical profession, and the hospitals, had found it necessary to "engage in a program of making necessary benefit changes and of pricing our service to reflect rising costs."

Some community groups, home demonstration club groups, farm organization groups, professional groups, etc., will be responsible to the member hospitals for a Member Participation Payment of $3.00 per day while a bed patient in such hospital.

The deductible feature will work much like the system now in use for automobile collision insurance, he said. The member will pay the first three dollars of the Blue Cross benefits used and the Plan will pay all over that amount.

"The utilization of Blue Cross benefits by some of these groups has in the past exceeded the amount of dues these groups have paid into the Plan," he said, in explaining why this step is necessary.

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Graduate School of Medicine

ANNOUNCES CONTINUOUS COURSES

SURGERY—Intensive Course in Surgical Technic, Two Weeks, starting August 4, August 18, September 8.
Surgical Technic, Surgical Anatomy & Clinical Surgery, Four Weeks, starting September 8, October 20.
Surgical Anatomy & Clinical Surgery, Two Weeks, starting September 22, November 3.
Surgery of Colon & Rectum, One Week, starting September 15.
Gallbladder Surgery, Ten Hours, starting October 20.
Basic Principles in General Surgery, Two Weeks, starting September 8.
General Surgery, Two Weeks, starting October 6.
General Surgery, One Week, starting October 20.
Breast and Thyroid Surgery, One Week, starting October 6.
Esophageal Surgery, One Week, starting October 13.
Thoracic Surgery, One Week, starting October 20.
Fractures & Traumatic Surgery, Two Weeks, starting October 6.

GYNECOLOGY—Intensive Course, Two Weeks, starting September 8, October 20.
Vaginal Approach to Pelvic Surgery, One Week, starting September 22, November 3.

OBSTETRICS—Intensive Course, Two Weeks, starting September 29, November 3.

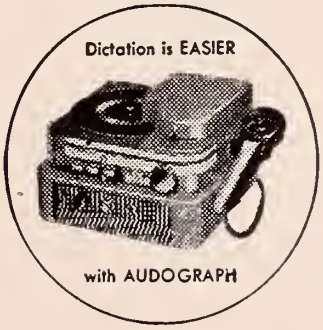
PEDIATRICS—Informal Clinical Course every two weeks.

MEDICINE—Electrocardiography & Heart Disease, Two Weeks, starting July 14.
Gastroscopy & Gastroenterology, Two Weeks, starting September 15, November 3.

UROLOGY—Intensive Course, Two Weeks, starting September 8.
Cystoscopy, Ten Days, starting every two weeks.

DERMATOLOGY—Intensive Course, Two Weeks, starting October 13.

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Medical School Notes -- Message From The Dean

DR. MARK R. EVERETT, DEAN, SCHOOL OF MEDICINE

One of the meetings which I have most enjoyed is the yearly Conference held in May with the newly appointed, or reappointed, Preceptors for the coming year. There are always three or four new Preceptors present, due to a policy of rotating some of these appointments each year, and those who have previously served relate their individual experiences for the benefit of the physicians who are new to the program. In listening to the Preceptors tell of their ideas of what makes a good Preceptorship, it is easy to see why the Preceptorship Program has been so successful from its beginning. No rigid program has been outlined for conducting a Preceptorship, thus permitting development around the Preceptor's personality and the medical conditions of the community. The results have been so gratifying to us at the School that we find ourselves "hard-put" to adequately express our appreciation.

In speaking of their work with the students, the Preceptors often make such remarks as: "I just guide them, maybe prod them a bit, and let them get the 'feel' of office practice;" or, "Why the folks in our town like having these boys around, they know that they are still students, but we all call them 'doctor,;" and, heard frequently, "I learn as much from the boy as he does from me." So you see the spirit is good. The students look forward to their preceptorship quarter and surely there is no other time during their undergraduate medical training when they can get a more general insight into the profession they have chosen than in these 11 weeks of close daily association with a practicing physician. These physicians exhibit a definite realization of how great their responsibility is to their students, a responsibility that they undertake on a 24 hour a day basis. Apparently, though, the rewards for their participation in the program are sufficient, since those who have served do not ask to be relieved. Here a problem arises for the Preceptorship Committee each year in its efforts to decide which of the Preceptorships should be rotated to allow room for the appointment of new Preceptors. This Committee is composed of two representatives each from the Oklahoma State Medical Association, the Alumni Association, and the Faculty, with the Associate Dean in Charge of Student Affairs serving as an ex-officio member. The Committee has felt very strongly that an opportunity to serve should be given to all those who qualify from the standpoint of sincere interest and ability to give to the students good advice and supervised experiences in the practice of medicine. An attempt is made, also, to distribute the Preceptorships in the various areas of the State. This has been somewhat difficult to do because more applications for appointment are received from the central and west portions of the State.

Although an authoritative survey has not yet been made to determine what effect the Preceptorship Program has had on encouraging young physicians to set up practice in the smaller towns, from a casual look at the record there appears to be a definite trend to such localities. Some of the students have returned to enter practice with their former Preceptors, and others have found towns in need of a physician and have started practice there.

Physicians appointed as Preceptors for the period June, 1952, to May, 1953, are: Dr. Carl H. Bailey, Stroud; Dr. Ned Burleson, Prague; Dr. Wallace Byrd, Coalgate; Dr. John M. Carson, Shawnee; Dr. M. A. Connell, Picher; Dr. Joe L. Duer, Woodward; Dr. J. William Finch, Hobart; Dr. Leon C. Freed, Perkins; Dr. Ray H. Lindsey, Pauls Valley; Dr. W. C. McCurdy, Jr., Purcell; Dr. E. A. McGrew, Beaver; Dr. John A. McIntyre, Enid; Dr. O. C. Newman, Shattuck; Dr. Van S. Parmley, Mangum; Dr. James S. Petty, Guthrie; Dr. Robert S. Srigley, Hollis; Dr. Aubrey E. Stowers, Sentinel; Dr. John R. Taylor, Kingfisher; Dr. C. A. Traverse, Alva; Dr. Henry C. Wolfe, Hugo; and Dr. J. F. York, Madill.

Other physicians who have served as Preceptors in previous years include: Dr. T. D. Benjegerdes, Beaver; Dr. A. L. Buell, Okmulgee; Dr. A. C. Little, Minco; Dr. Herbert A. Masters, Tahlequah; Dr. J. M. McMillan, Vinita; Dr. James F. McMurry, Sentinel; Dr. V. W. Pryor, Holdenville; Dr. Roscoe Walker, Pawhuska; Dr. A. J. Weedn, Duncan; Dr. L. R. Wilhite, Perkins; and Dr. Earl M. Woodson, Poteau. In addition, each year there are between 50 and 60 physicians who serve with the Preceptors as Associate Preceptors.

There is no doubt that the Preceptorship Program is now an effective part of the senior curriculum, and not only in Oklahoma. A recent report shows that nearly one-fourth of the medical schools have begun a Preceptorship Program during the past few years, differing somewhat in length of time, but all aiming at the same general principle. I think we have a right to be proud of the fact that our's was the second school to start a Preceptorship Program. (The University of Wisconsin has had such a plan in operation for many years.) A special word of thanks goes to the Alumni Association for urging the idea.

Dean Marsh tells me that the students bi-weekly "log" of their Preceptorship experiences provides very interesting reading, and that from them he knows that these experiences mean a lot to the students. One comment that came from a student who was in the first class to participate in the program was: "They told me I was going out to learn about small town practice of medicine, but I found it "big town" medicine practiced in a small town."

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OBITUARIES

E. ELDON BAUM, M.D.

1896-1952

E. Eldon Baum, M.D., Oklahoma City physician who had been completely disabled the last three and a half years, died at his home May 6, 1952.

He was a native of Kansas City and a graduate of the University of Oklahoma School of Medicine and practiced in Tulsa and Vinita before coming to Oklahoma City. He was a member of St. Paul's Episcopal church and of the Masonic order. He was also a member of the Co-operative Club and the Oklahoma City Chamber of Commerce and had been an active worker for the symphony society.

Survivors include the widow of the home, two sons and a brother.

ROBERT L. MITCHELL, M.D.

1876-1952

Robert L. Mitchell, M.D., died May 15 in the Veterans Hospital, Muskogee, where he served on the staff for 25 years.

He had retired from the staff in 1948 but after a few months joined the staff of the Eastern Oklahoma Hospital at Vinita where he had served until his recent illness.

Doctor Mitchell was born in Delaware County and prior to World War I he practiced at Vinita and Welch after graduating from Shawnee Medical School. He served in the medical corps in World War I. He was a member of the Masonic Lodge.

Survivors include a son, three sisters, five brother and three grandchildren.

K. D. GOSSOM, M.D.

1878-1952

K. D. Gossom, M.D., pioneer Custer County physician, died May 15. He had been bedfast since Christmas.

Born in Milton, Kentucky, Doctor Gossom came to Custer City in 1903. He retired from active practice in 1940 and moved to Clinton. However, during the war, he re-entered practice to act as medical supervisor for the firm which built the Clinton Naval Air Station and later was medical supervisor of the Dupont plant at Hanford, Wash.

We was a member of the First Methodist church, the Masonic Lodge, and the Shrine.

Survivors include his widow of the home, three daughters, one son, three brothers, one sister, and five grandchildren.

ERNEST THOMAS, M.D.

1883-1952

Ernest Thomas, M.D., Quinton, died May 8, 1942. Born at Tupelo, Miss., he spent most of his life in Oklahoma. He was graduated from the Arkansas School of Medicine in 1911 and settled near Enterprise.

He was a member of the Baptist church, Masonic Lodge and the Shrine.

Survivors are the widow, three sons, a daughter, three brothers and two sisters.

ANDREW JACKSON SNELSON, M.D.

1862-1952

Andrew Jackson Snelson, M.D., member of the first Oklahoma state legislature and a practicing physician for 54 years, died May 4 at his home in Checotah.

He had made his home in Eastern Oklahoma and practiced medicine continuously since his graduation from the University of Arkansas School of Medicine in 1898. Born in Johnson County, Ark., he had taught school in his home county for 19 years before entering medical school. He first established his practice at Wister and then moved to Oktaha. He served as first mayor of both cities.

He was a member of the Presbyterian church, Masonic lodge, Knights Templar, Oddfellows, Shrine and took an active interest in politics.

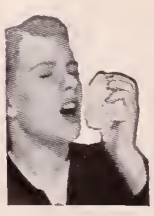
Survivors include his widow of the home, seven sons, a step-daughter, three half-brothers and many grandchildren.

RADIOLOGISTS ELECT NEW OFFICERS

Newly elected officers of the Oklahoma State Radiological Society for two years terms are: president, Walter E. Brown, M.D., 2020 South Xanthus, Tulsa; vice-president, Edward D. Greenberger, M.D., Medical Arts Bldg., McAlester; and secretary-treasurer, John R. Danstrom, M.D., Medical Arts Bldg., Oklahoma City.

POSTGRADUATE COURSE OFFERED IN DENVER

Applications may now be sent in for the postgraduate course, Diagnosis in Internal Medicine with Emphasis on Physical Diagnosis, offered by the University of Colorado School of Medicine, 4200 East Ninth Ave., Denver 20, Colo., July 2-25. Registration fee is $5.00 and should be sent with registration.

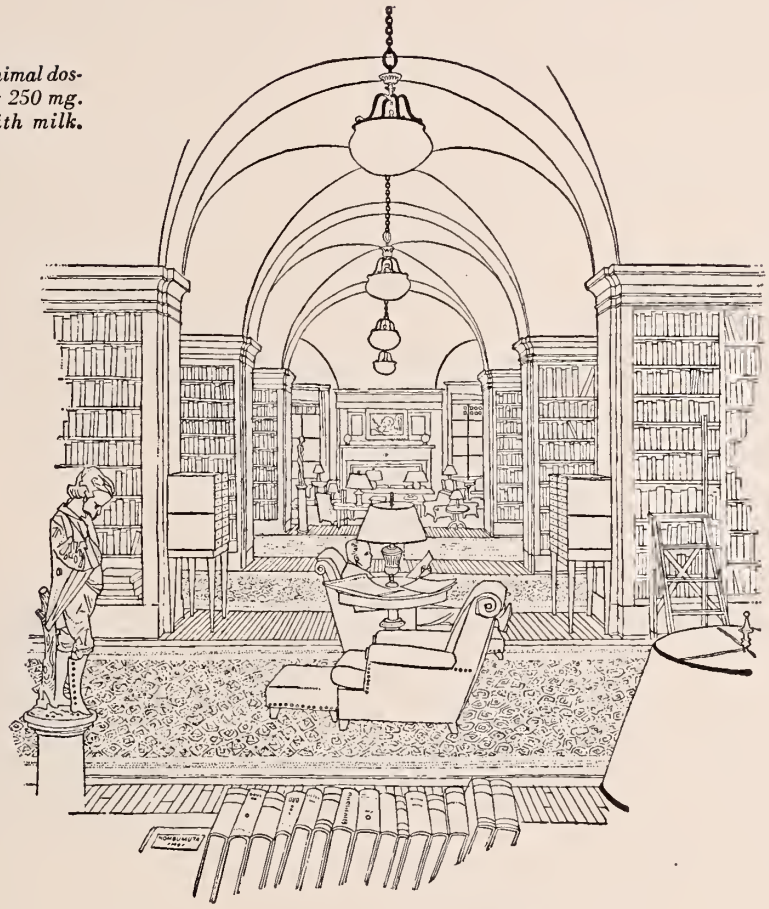


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BOOK REVIEWS

MEDICAL BIOGRAPHIES. The Ailments of Thirty-Three Famous Persons. Philip Marshall Dale, M.D., University of Oklahoma Press, Norman. 1952. Price $4.00.

Following the author through this intriguing volume amounts to an interesting adventure. The journey leads from Buddha in the fifth century B.C. to Robert Louis Stevenson in the 19th century. It supplies intimate knowledge concerning the lives of 33 famous persons.

For the non-medical reader, the book supplies interesting historical and biographical data and whets the popular medical curiosity so obvious among modern readers. For physicians it becomes an interesting game with varied diagnostic speculations which may not always lead to agreement with the author. This is natural since consultations concerning even living patients often lead to differences of opinion. This necessary element of uncertainty makes the game more worthwhile. The case histories with the well ordered diagnostic discussions should prove stimulating and instructive to medical students as well.

With one exception, each biographical sketch is accompanied by a portrait of the famous person under discussion. This exception carries a note of sadness. Obviously there were no photographers on Pigeon Creek in the backwoods of Indiana where Nancy Hanks Lincoln lived and prematurely died of "milk sickness."

The work has literary as well as scientific merit and should have a wide reading.—Lewis J. Moorman, M.D.

LET'S HAVE HEALTHY CHILDREN, Adelle Davis, A.B., M.S., Consulting Nutritionist, Harcourt Bruce and Company, New York, 1951.

In a very interesting, stimulating and informative presentation, though at times a bit dogmatic and occasionally provocative, Adelle Davis covers the importance of proper diet in the welfare of the pregnant mothers and its effect on the growth and development of the fetus, the infant and the child.

The author has a practical approach to the problem which she has gained from years as a nutritionist in close cooperation and with the assistance of members of the medical profession.

The essentials of a good diet and the methods and manner of providing them are discussed candidly, together with the presentation of easily readable and usable charts on food analysis.

Especially would we emphasize her views on the importance of optimum health before pregnancy occurs and the value of the diet in the preconception period as well as during pregnancy and lactation.

Everyone will enjoy and benefit from Chapter 14 on "Controversies Applying to All Babies." Very enlightening too, is her treatment of the dietary problems of the pre-school child. She stresses the value of protein, yeast, blackstrap molasses and yogurt in attainment and maintenance of optimum health of all ages.

Much helpful information is contained in the discussion on the importance of soil factors and mineral content, on the storage and processing of foodstuffs in relation to their efficiency in nutrition.

One might accuse the author of over-simplification of some of the problems covered, such as COLIC, FOOD ALLERGY, THUMB SUCKING, the use of a PACIFIER and WEANING from the bottle.

All in all, however, we would recommend the book as well worth reading.—George H. Garrison, M.D.

HAVE YOU HEARD?

H. A. Foerster, M.D., Oklahoma City, attended the 84th Annual Meeting of the Mississippi State Medical Association held in Jackson, as guest of James Thompson, M.D., President.

A. M. Brown, M.D., Perry, has been elected president of the hospital staff of that city.

Charles Green, M.D., Lawton, is building a new 50x80 foot, one story, brick veneer clinic building.

E. E. Waggoner, M.D., Tonkawa, was recently honored when the residents of his community proclaimed "Dr. Waggoner Day."

J. William Finch, M.D., Hobart, spoke on "Medicine as a Career" when he addressed high school senior boys participating in the Kiwanis vocational guidance program.

L. C. Freed, M.D., Perkins, was a recent guest speaker at a meeting of the ladies of the Elm Grove Community.

Lonnie C. Redus, M.D., who has just completed a residency at University Hospital, Oklahoma City, has joined the Weatherford hospital staff.

Bob Lowery, M.D., Poteau, was recently featured in the "Know Your Neighbor" column in his hometown newspaper.

Capt. Wm. Miller, formerly of Oklahoma City, is cheif of orthopedics at the P.O.W. hospital at Pusan. He has been overseas 17 months.

Rossler H. Henton, M.D., has returned to his home town of Rush Springs to establish his practice after completing his internship at Hillcrest Hospital in Tulsa.

Charles N. Talley, M.D., Marlow, recently attended a postgraduate course at Cook County Graduate School of Medicine in Chicago.

MEDICAL SCHOOL ADMITS 100 FOR FIRST YEAR CLASS

With more than 200 applications received and reviewed, 100 first year students were accepted for admission to the University of Oklahoma School of Medicine for the first year class of 1952.

Forty counties are represented by students in the class and applicants accepted previously attended the following colleges and universities: Oklahoma University, Oklahoma City University, Oklahoma A. and M. College, Oklahoma Baptist University, Central State College, Northeastern State College, Northwestern State College, Southeastern State College, Southwestern State College, East Central State, Phillips University, Tulsa University, Langston University, all of Oklahoma and the following out of state schools: University of Rochester, Austin College, Westminster College, University of Wichita, McPherson College, Lafayette College, Northeastern University of Boston, and Abilene Christian College.

The class will include one woman student and 19 of the students are veterans. The average age of the class is 21.56 and the average age of the 10 alternates is 24.3.

Number of students accepted from the various counties is as follows:

Alfalfa, 1; Beaver, 1; Beckham, 1; Bryan, 2; Caddo and Canadian each have 1 alternate; Cherokee, 2 (also 1 alternate); Choctaw, 1 (1 alternate also); Cimarron, 1; Cleveland, 3; Comanche, 4; Craig, 1; Custer, 1; Garfield, 4; Grady, 1; Grant, 1 alternate; Greer, 1; Harmon, 1; Harper, 1; Haskell, 1; Hughes, 3; Jackson, 1; Kay, 2; Kiowa, 1; LeFlore, 1; Logan, 2; McClain, 1; Major, 1; Muskogee, 3 (2 alternates); Nowata, 1! Oklahoma, 20 (2 alternates); Okmulgee, 2; Osage, 1; Ottawa, 1; Payne, 4 (1 alternate); Pottawatomie, 1; Seminole, 5; Sequoyah, 2; Texas. 2; Tulsa, 12; Washington, 2; Washita, 4; and Woods, 1.



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THE JOURNAL

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OKLAHOMA STATE MEDICAL ASSOCIATION

EDITORIALS

ON SCIENTIFIC WRITING

Because of the type of program at our 1952 State Meeting the Editorial Board did not receive the usual quota of scientific manuscripts. The resulting dearth of scientific material for the *Journal* makes it necessary for the Board to tap other sources. The members of the State Association are invited to send to the Editor-in-Chief manuscripts dealing with scientific subjects of practical or historic interest. All manuscripts received will be reviewed by the Editorial Board and those considered most noteworthy, practical and serviceable will be chosen for publication.

It should be remembered that the principles governing the use of English in medical writing are the same as in other fields. But the medical writer cannot escape the responsibility of clear cut, straight forward expression for the direct transmission of thought. First the medical writer should know what he means to say and before he puts it in writing, he must be sure he has found the words which are best suited for the expression of what he has in mind. Even though he finds the words which made his thoughts clear to him, he must be sure they will appear equally clear to the reader.

Matthew Arnold once said: "Have something to say and say it as clearly as you can. That is the only secret of style."

Robert Louis Stevenson said, "The difficulty is not to write, but to write what you mean, not to affect your reader, but to affect him precisely as you wish."

Some medical writers who know exactly what they mean leave the reader in a state of confusion because the words employed are not the vehicles needed to convey his meaning or it may be he has overestimated the reader's imagination. Those who do not think clearly cannot hope to write clearly. Yet it may be said that even scholarly writing may be wanting in the matters of direct and concise conveyance of scientific thought.

The readers of medical journals are not willing to waste time puzzling over the meaning of concepts and sentences because of the inept choice of words, indirect forms of expression and the superfluous use of langauge. Neither can they afford to risk the wrong interpretation of the writer's meaning.

Again quoting Stevenson may we say that those who do scientific writing should remember, "If there is anywhere a thing said in two sentences that could have been as clearly and as engagingly and as forcibly said in one, then it's amateur work." Certain chapters in *The Wrecker* were rewritten 11 times. In this connection he said, "I am always cutting the flesh away." What better motto for medical writers could be found?

RICH IN SERVICE

According to the philosophy of Elizabeth Barrett Browning, the physician who honors his profession should be rich indeed.

"A poor man served by thee shall make thee rich;
A sick man helped by three shall make thee strong;
Thou shalt be served thyself by every sense
Of service which thou renderest."

PHYSICIANS AS HUMAN BEINGS

Centuries ago physicians were writing about doctors of medicine who departed from the fold to follow pursuits not directly related to medicine. One of the most comprehensive of the books on this subject is *The Physician As Man of Action* by Monro briefly reviewed in this issue of the Journal.

It is well known that physicians readily turn to poetry, art, literature, music and sports. But some may be surprised to learn that of the 25 chapters in this volume, one is devoted to piracy and one to crime. There is nothing new under the sun and physicians have long been exposed to the light of day but physicians are human and each day has its night.

LIBRARY OF THE
COLLEGE OF PHYSICIANS

EGOTISTICAL DEMOGANGUERY UNDER THE GUISE OF ALTRUISM

Already the so-called Social Security has destroyed all incentives toward individual charity with its personal blessings. This is particularly true in medicine. The cry "no charity" is a socialistic trick in the overall move toward the welfare state. Medicine has suffered a great loss through the insidious socialistic trend with its uplifting promises and demoralizing performances.

Doctors the world over are gullible, otherwise Bismarck would have been blocked before German medical initiative, ingenuity and independence, were destroyed and Britain's Bevan would have been beaten before the degrading, and annulling 1948 National Health Act destroyed the traditional scientific independence of the British medical profession.

These destructive socialistic schemes could never have gone into action without doctors. When the members of the British Medical Association voted to cooperate and participate they trifled away their scientific and humanitarian birthright and speeded the marathon toward physical and financial bankrupcy for the Empire.

Are we American doctors so gullible we cannot learn by example? Apprized of the inevitable are we willing to be driven to the yoke like dumb brutes. Even the ox is reluctant and requires cussing and beating which a red blooded human being with an intellect should never tolerate.

Is there not a Patrick Henry among us. The question is, to be a scientific humanitarian freeman, or not to be. Shall we bow to the bureaucrats or fight for our liberty under the Constitution and the Bill of Rights.

Are we doing anything today that will safeguard our professional freedoms of tomorrow.

AN EYE ON EWING

In bureaucracy always there is something doing. To his "buddies" of the New Jersey State Federation of Labor the great administrator of our security declares that the public (definition please) is clamoring for national health insurance and warns against complacency." . . . Our work is far from done. The battle for security is only partly won."

Physicians interested in their patients, their people, their "public" and their profession should not look to organized medicine for the solution of the problems posed by Oscar Ewing. On the contrary, individually they should make sure that their professional service cover the sum total of the patient's needs—physical, psychological and financial. The physical and psychological are directly in line of duty. Often the financial can be managed without loss to the physician. There is immediate reward in the satisfaction of having negotiated a serious problem with good therapeutic and psychological effect. The potential rewards are incalculable. Often they are matirical, and in the end they may stand as a bulwark against the administrator of a misnamed government agency.

For protection against socialized medicine, each physician must do his duty according to the traditions of his profession and then look to his patients for support. The best public relations spring spontaneously from private relations. Planned publicity can never take the place of participation in the patient's physical and psychological shortcomings with the sacred trust the patient-physician relationship implies. Universal militancy in the application of this philosophy would soon put the Public Relations and the Grievance Committees out of business. Why not try it?

NEEDLE BIOPSY OF THE LIVER

The facts about needle biopsy of the liver, increasingly available for more than a decade, should be pinioned and pondered by everyone who contemplates the employment of this useful diagnostic procedure. Indications, technique, results, risk complications and mortality in the following discussions chosen from a number of recent articles: "Risk of Needle Biopsy of the Liver" by Terry[1] and "Experience with Liver Biopsies in a Private Hospital" by Meitus.[2]

The fact that diagnostic information obtained is often equivocal should be kept in mind; the possibility of serious complications should never be forgotten and the variation in the reported mortality resulting from the procedure suggests the need of a careful study with reference to selection of cases and the standardization techniques with the hope of more uniform results with added safety to the patient. The procedure has its place and should be employed with standard technique in well selected cases.

1. Risks of Needle Biopsy of the Liver. Richard Terry, M.D., M.R.C.P. British Medical Journal. (May 24) 1952. Page 1102.
2. Experience with Liver Biopsies in a Private Hospital. Marvin L. Meitus, M.D. Ohio State Medical Journal 48:6:515-520 (June) 1952.

Scientific Articles

SOME CURRENT THINKING ON INFANTILE COLIC*

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The frequency with which this complaint has been met prompted perusal of the subject. Brennemann[1] stated few infants escape entirely.

You are all familiar with the features of this condition. The pain has been described as of sudden onset, intermittent, paroxysmal, sharp, intense, agonizing. The infant becomes suffused, almost cyanotic at times, and the cry can be a scream. The abdomen is usually distended, tense, and tympanitic, but soft between episodes with no apparent localized tenderness.

Though not common, serious organic pathology may arise in this age group, and the practitioner must be wary lest he overlook an intussusception, diaphragmatic hernia, internal hernia with a volvulus, and other anomalies with intestinal obstruction. Gasul[2] reported a group of four cases of anomalous origin of left coronary arteries, the so-called Bland-White-Garland Syndrome. "Infants with this anomaly appear healthy until two or three months of age when they begin to have colicky pains, usually during, or soon after, feeding associated with rapid pulse, rapid respirations, pallor and profuse perspiration." The infants have enlarged hearts and characteristic electrocardiograms.

The age of onset, interestingly, is seldom before one or two weeks, and the great majority seem to subside at about three months, Glaser[3] indicated the latent period was that necessary for an individual to manifest sensitization to cow's milk proteins. That author feels that the more severe cases are certainly allergic in origin. The tenseness and the anxieties that frequently accompany a newborn (especially the first newborn) home may also contribute to symptoms beginning at this period;[4]; i.e., change of handling, new crib, voices, noises. This may be a reason to further encourage rooming-in.

Most mothers complain that the severity of this entity is increased in the late afternoon and evening. Fatigue of infant and mother with attendant tension may be more active factors later in the day. Brackett[5] suggests, "failure of ileocecal sphincter to allow passage of chyme into cecum fast enough to keep the accumulation in the ileum down to a volume which will not evoke major peristaltic contractions; this is worse in late afternoon because of increasing volume of residue in the lower ileum at this time of day."

The nutrition of colicky infants is usually better than average. This fact, if presented graphically to the parents, proves reassuring; namely, that their offspring cannot be seriously ill and gain so admirably.

Is colic limited to a home situation? Emphasizing the tense household again Levin[6] pointed out the relative absence of colic in an institution. In the summary of that article, it is conceded that perhaps keener observation may be indicated before generalizations are made.

Brennemann,[1] in his discussion of infant feeding, indicated that colic was frequently more severe in breast-fed babies. Even though our present percentage of nursing mothers in Tulsa is relatively small, it is our opinion that the incidence of colic is definitely less in this group. If allergy to cow's milk protein plays a significant part, and more recent evidence seems to confirm this belief,[3,4,5] then we are correct in our effort to encourage more women to nurse, especially when there is a strong allergic diathesis.[4]

Attempts to explain the etiology of this symptom complex are numerous. Actually I have been able to list seven different factors purported to elucidate this problem. Each point has several advocates and, admittedly, some overlap each other.

1. Hunger or underfeeding: hungry babes cry and swallow air (aerophagia)—air distended loops of bowel in an immature intestinal tract lead to "enterospasm".[7] Watson

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feels that a liberal self-demand schedule, especially during the first two to four weeks, has proven helpful. That author pointed out that many neonates during this period took 8-10 or even 12 feedings in a 24 hour period, and then gradually assumed a reasonable four hour feeding interval. Obviously, good feeding technique and adequate burping is essential. There may be less aerophagia with collapsible bottles (Shellie Nursers).

2. Overfeeding with presumably more fermentation has less often been incriminated. The old standbys of low carbohydrate feedings, enemata, suppositories, pressure to abdomen with or without a warm water bottle, and sphincter dilatation, sedatives and antispasmotics should be tried.

3. Brackett's[5] hypothesis, as mentioned previously (i.e., malfunction of ileocecal valve) should be helped by measures outlined earlier.

4. Immaturity of the nervous system, "undone intestinal tract," autonomic imbalance has been stressed by Gesell and Spock. Reassurance and symptomatic measures apply here.

5. Harris,[8] in a recent article derived from studies at Rochester, Minnesota, noted a significantly greater percentage of colic with formulae higher in added carbohydrate. Along these lines we have used high protein, low fat, low carbohydrate formulae (Dryco, Alacta, Casec in skimmed milk), in the more persistent or refractory cases with reasonably satisfactory response. Large quantities of these are taken, usually more concentrated than the manufacturer recommends. It is desirable to keep up this type mixture until three months. Subclinical neonatal tetany conceivably could cause some cases of colic. Whether adjusted calcium phosphorus ratios in milk (e.g., Bremil) could help should be investigated further.

6. Fatigue and/or tension in infant and parents, I'm sure we all agree, can aggravate any basic situation. Accumulation of these stresses and strains has been used to explain the evening climax so typical of colicky bouts. Anderson[9] describes a "neuropathic diathesis," thus anticipating a tense, hypertonic infant with high-strung parents. Levin[10] reported encouraging results in treatment of colicky infants with a pacifier. The fact that the average child in that series continued using a pacifier until almost 14 months lessens my enthusiasm for this. We have used them in early months to alleviate critical periods. Poncher's[11] comment on Levin's work is interesting, in that he questions the proof that oral gratification is lacking and instead suggests ruling out anal fissures, poor feeding techniques, painful defectation, skin or other sources of irritation. Otitis media and occluded nares can also cause irritability. Perhaps fondling may accomplish as much as a pacifier. Even though the results in our hands have been questionable, I can see no serious objection to the judicious use of such preparations as Elixir of Donnatal or Syrup of Bentyl Hydrochloride. The trial of the latter proprietary by Pakula[12] was apparently favorable. Not infrequently parents have expressed disapproval of "doping" their infants.

7. I am impressed by the number of papers presenting convincing evidence that infantile colic can be caused by allergy.[3,4,5,13,14,15] As pointed out previously, the incubation period is reasonably explained on Glaser's premise that one or two weeks is needed to develop sensitization to cow's milk. He states that not all colic is due to allergy, but probably the more severe types are. Clein,[13] in a recent article lists 14 symptom complexes due to cow's milk allergy. Symptoms begin frequently, when the infant is taken off the mother's breast. As Rosenblum[14] suggests, cases of colic, pyloro-spasm, even pyloric stenosis, unexplained abdominal pain, cyclic vomiting, celiac syndrome can be allergic manifestations. Glaser went so far as to add hydro-ureter and megacolon to this list. McKee[15] emphasizes the import of family history of allergy; namely, if one or both parents have respiratory or digestive type allergy, the incidence in offspring is great. This may be speculation, but that author suggested that 50 per cent of infants with a history of fetal hiccoughs will show colic due to milk sensitivity; and colicky infants often develop into children or adults with respiratory or digestive type of allergy, similar to the eczema-asthma link. Eosinophiles in smears from stool mucus stained with May-Grunwald technique has been used with some success in our office in suspected cases. As a general approach to early infant feeding, breast nursing should be encouraged if feasible. Evaporated milk is less allergic than homogenized, and it is recommended that the latter be avoided during early months routinely. With a suggestive history or a positive smear, a substitute for cow's milk should be tried. Consensus is that soy bean milks (Mullsoy or So-bee) or amino acid mixtures (Nutramigen) alleviate much

more frequently a frank cow's milk allergy and that goat's milk has given disappointing results. The results can be dramatic, a change in the total picture appearing in 24 hours—a fair trial of a preparation, however, probably should be four or five days minimum. Rapid-fire introduction of cereals, fruits, vegetables, custard, etc. in the early months is mentioned only to be condemned even in the absence of feeding problems.

SUMMARY

1. Some of the clinical features and etiologic factors of infantile colic have been reviewed.

2. Ingestion allergy (especially to cow's milk) occurs sufficiently frequently in the neonatal period to warrant its consideration.

3. Some of the current suggestions in the management of infantile colic are included.

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HELPING YOUR PATIENT ACCEPT PSYCHIATRIC REFERRAL*

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In recent years, it is noteworthy that a frequent question raised by many physicians is "How can I get a patient to see a psychiatrist?" This has come up both at meetings and in personal contacts between psychiatrists and other doctors. It is a situation that exists as a result of one of two factors, both of which can be overcome; objections and resistance on the part of the patient and inadequate understanding of psychiatry on the part of the doctor. Both of these factors may be said to have the same common denominator, fear, fear of the unknown. The doctor who is insufficiently aware of psychiatric ideology and technique cannot be expected to be a believer himself. Since he has his own doubts and questions, he cannot convincingly suggest psychiatric referral to his patient. Also, in some instances, in an effort to cover up his own feelings of inadequacy in the understanding and handling of emotional problems, the physicians may be too abrupt and rejecting of the patient. His referral may then be too blunt, as "I can't do any more for you; you better see a psychiatrist." Or, as noted in other instances, the patient may be told "Nobody can help you but yourself; maybe you ought to see a psychiatrist." The unintentional rejection of the patient in both instances as above is obvious, once we look at it in that light. Also, in the second remark we see the obvious contradiction; a contradiction which might have eluded the doctor but which makes an indelible impression on the patient. In short, if nobody can help the patient, why suggest another doctor? I am convinced that the physician does not intend such conclusions, but they result from his own feelings of frustration in the particular case. This is in no way intended as a criticism of the doctor but is pointed up as the result of deficiencies in our medical education of the past. It is being gradually overcome and corrected through the more efficient present-day integration of psychiatric teaching in our schools as well as through postgraduate instruction and meetings of the kind we are enjoying here and now. The result is already becoming apparent in that doctors are looking upon psychiatric referral just as they do referral to the dermatologist; namely, as a medical condition which they have not been able to reach with their approach and which is of a nature requiring the attention of the specialist in that field.

In short then, as the doctor himself feels more at ease and less defensive about this

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branch of his profession, referral will be easier and more natural. The fear by the doctor of patient reaction is not always well-founded, as is evidenced by the patient's comment, "Why didn't my doctor suggest this a year ago?"

The obvious psychotic patient does not present a problem in referral. If he is agitated, depressed, confused, if he expresses feelings of persecution, hallucinations, or ideas of grandiosity, if he has become seclusive, disinterested in his appearance and his environment, the family is sufficiently aroused and concerned to recognize and accept the need for psychiatric attention.

The patient with primary symptoms of moderate to severe anxiety is himself ready for psychiatric help. If the patient is unduly distressed in crowds, in public places, is unable to stay at home alone or go out alone, if he feels uncomfortable around sharp objects, is obsessed with the fear that he might harm his loved ones, if he is subject to crying spells for no apparent reason, etc., he is quite aware of the existence of a nervous disorder and is ready to accept your referral. The only question, and fear, in his mind is that he is "going insane," and he wants your assurance that such is not the case. Such assurance can usually be given with safety and sincerity, with the additional comment that the psychiatrist is the one to help them try to seek out and eliminate the "unknown" cause of their reactions.

The real problem in referral is limited, for the most part, to that group who present the combination of physiological, or organic, and psychogenic disturbance. The neurosis in this group is expressed through the soma and attention is naturally focused thereon. They have succeeded well in hiding their basic anxiety from themselves. The somatic symptoms offer them a refuge and escape from their emotional stress that is acceptable to their own ego and to society in general.

In the above group we find the backache that defies physical diagnosis and treatment, the chronic fatigue state, sleep disturbances, recurrent headaches of all types but especially the low occipital and post-cervical variety, dizziness, visual and auditory disturbances. These are the patients who present functional symptoms running the entire length of the gastro-intestinal tract, from esophagus to rectum, including spasms, pains, indigestion, gas, colitis and constipation; or their focus may be on the cardio-vascular or respiratory system, with symptoms too numerous and familiar to enumerate here; the genito-urinary system may bear the brunt of their search for emotional release, with such common complaints as frequency, urgency, dysmennorhea, disturbances of normal menstrual function, frigidity, dyspareunia, and impotence; their break-through may be via the skin or allergic manifestations.

As a patient in the above group presents himself to his doctor and relates his physical distress and fear of disease, the presenting complaints are stressed and a history pertaining to them is taken. Physical examination and indicated laboratory tests are done. If no organic basis for the complaints is found, it then behooves the physician to sit back for 10 or 15 minutes and listen to the patient expound further on his symptoms. If more time is available, it would be desirable to listen even longer. This additional history may suggest other indicated examination procedures or may, in itself, rather definitely rule out organic pathology since no true physiological pattern is followed. The longer we listen, the more obvious and positive does the tentative diagnosis of either organic or functional illness become. When other indicated physical procedures still fail to point up organic causation, we now come to the crucial point.

The patient too often is told, "there is nothing wrong with you"; or "I can find nothing the matter with you"; or, "you're in fine shape, you don't have a thing to worry about." These statements are incorrect, as far as they go. It must be kept in mind that the patient would not have come with his complaint if there were nothing the matter. He feels deeply hurt because he does have something to worry about. His doctor has failed him, has not understood him. Down goes the medical profession in his estimation and up go the other varieties of so-called healing arts. Also, with his pride hurt, his physical symptoms become set and possibly more pronounced. An issue has been created and he must prove to himself, his family and all others that there is something wrong.

If the patient is still suffering, still feels incapacitated, the statement that there is "nothing wrong" is interpreted by him to mean that the doctor thinks he is "imagining" his trouble. Of course, he is sometimes actually told that it is just his "imagination." This term would best be deleted from the

vocabulary of physicians, for it suggests that the patient is voluntarily making up a story. Such is far from true, since his distress is real.

Having completed physical studies and concluded that no organic pathology exists, the physician is not yet in a position to suggest psychiatric referral. The patient has already begun to develop a feeling of confidence in his physician as a result of being heard and examined. It should be developed further rather than be destroyed. This is the moment for a question as to whether or not he has been worried of late. If he does not recognize any worry as such, one should inquire as to whether or not he has felt tense, or irritable, or had a general feeling of dissatisfaction. Has he felt "nervous" along with his symptoms? This approach is usually rewarded by an outpouring of feelings, the opportunity for which is welcomed by the patient.

The physician is now ready to indicate the absence of organic pathology, while explaining that the symptoms experienced are frequently the result of tensions rather than actual disease of the organ system involved. It can be pointed out that feelings and situations as described by the patient result in "nervous tension," or more properly, emotional tension. Such tension interferes with the normal functioning of organs. With this interference in function, rather than in disease of the organ, there will result symptoms of distress.

The patient has come to the doctor for assurance. As seen from the above, he has received it. He has been prepared for a recognition of the fact that his complaints are genuine, that his suffering is understood and accepted, and that there can be emotional factors which so disrupt normal physiological function as to account for his incapacity. To help the patient feel more convinced, one can utilize the example of a sudden fright with its normal physiological results and sensations experienced by the individual. Everyone has had such experiences and recognized cause and effect, with no further thought given to it. When the patient sees fright as a sudden, strong emotional stimulus which provokes an acute tension state, he may be better able to appreciate how weaker and less emotional reactions may gradually build up a tension state which finally is comparable, in its end results, to fright.

Many patients can receive the help they need just through such recognition of cause and effect plus some mild tension-easing medication over a short period of time to help them over the initial hump. The opportunity to express their feelings over some specific situational conflict to a person in whom they can place their confidence and who does not blame them, is of no little importance in their progress. One should plan to see these people at regular intervals for 15 minute sessions to permit them to relate their progress, ask questions they may wish clarified and to air out pent-up feelings that developed in the interim. This is also indi cated to enable the physician gradually to remove the crutch offered the patient in the form of medication at the beginning.

Where the above plan does not suffice, and the physician feels more specialized help is needed, he is then in a much better position for successful psychiatric referral. He has the patient thinking in terms of emotional factors. He can then indicate that there apparently are factors of an emotional nature beyond his capacity to fathom, that he has helped the patient to the extent of his ability in that specialized field, and he would like to have the patient see a psychiatrist, who is a specialist in that branch of medicine, for further evaluation.

In the same fashion should one approach the problem of the patient who has some actual organic pathology, but whose reaction is far beyond that which we have learned to expect. Again, one would look for emotional tensions in order to indicate to the patient that the existence of such will accentuate symptoms of organic pathology. The greater the amount of attention focused on one's self, the greater the pain and discomfort.

Objections that might be raised by the patient should be anticipated. "Do you think I'm crazy, Doctor?" This calls for further reassurance and an explanation of the place of psychiatry in medicine, with the role of community psychiatry today in the treatment of emotional disturbances rather than mental illness. Emotional maladjustment may be considered as resulting from poor habits of thinking and feeling. Psychiatry is concerned with helping the patient modify such attitudes. It may well be regarded as a re-education in the art of living, to prepare one better to face the daily stresses of every day life.

Many individuals have erroneous ideas as to the expense involved and the length of

time required. Although it is true that some conditions may call for lengthy treatment and consequent larger financial outlay, the majority of patients with neuroses will respond to brief psychotherapy. They will respond with relief of distress to the point where they can continue to function more efficiently and happily in their daily lives. And the cost of such treatment for the majority, spread out over a period of time, would be much less than that involved in a major, uncomplicated, surgical procedure and its attendant hospitalization and loss of time from work. In fact many will find the cost less than that of a so-called minor surgical procedure, or the cost of recovery from a pneumonia requiring hospital care.

Another element of resistance is found in the feeling by many that to seek psychiatric help is an admission of weakness. They should be able to solve their own problems. It is a reflection on their "will-power." These individuals must be helped to see that emotional disturbance and tension is as much a disease or illness as pneumonia, appendicitis, etc. Each of these conditions requires special knowledge and treatment techniques which they, the patients, do not possess. They should no more expect to overcome their emotional illness without help than they would their physical ailments for which they seek medical aid.

SUMMARY

1. Difficulties that arise in efforts to refer patients for psychiatric help stem from attitudes of the patient, the doctor, or both. The doctor depends for his own attitude upon his understanding of what is involved in the psychiatric approach and that goes back to the previous inadequancy of instruction in the medical school curriculum and to the language of their own and generalities in which psychiatrists have heretofore indulged. Both of these are being corrected.

2. The patient who presents the greatest problem in this regard is the one whose neurosis is expressed through disturbance in physical functioning.

3. To prepare such an individual for possible eventual referral, the physician must help develop a feeling of confidence in himself by the patient, through revealing to the patient an appreciation of his suffering and a healthy respect for it. Instituting a superficial psychiatric approach himself, and helping the patient see the emotional basis for disturbance in organ function, will enable the patient to accept more readily subsequent referral to a specialist if needed.

4. Anticipate the patient's objections to psychiatric attention and be prepared to handle such objections directly, sincerely and truthfully.

MEET OUR CONTRIBUTORS

H. L. Puckett, M.D., Stillwater, has an article on "Emergency Treatment of Severe Head Injuries" in this issue of the Journal. Doctor Puckett, who has practiced in Stillwater approximately 15 years, was graduated from the University of Michigan in 1931. He served a rotating internship in Boston and a general surgical residency in Boston and Newport, Rhode Island. He has been certified by the Board of General Surgery, and is a Fellow of the International College of Surgeons. During World War II he was in the service 42 months, 21 months of that time having been spent overseas.

Ray H. Lindsey, M.D., Pauls Valley, wrote the paper, "The Preceptor Plan" in the current issue of the Journal. Doctor Lindsey was graduated from Northwestern University in 1930 and served his internship and residency at the Scott and White Hospital, Temple, Texas. He has been certified by the American Board of Surgeons and is a fellow of the American and International College of Surgeons. He is also a member of Southwestern Surgical Congress. Doctor Lindsay, who has practiced in Pauls Valley 20 years, was in the service 42 months in World War II. At the time he was released from service after 30 months overseas, he was a lt. col.

Harold J. Binder, M.D., Oklahoma City, is the author of "Helping Your Patient Accept Psychiatric Referral." Doctor Binder, whose specialty is psychiatry, was graduated from Tufts Medical School in 1935. He interned at Holyoke Hospital, Mass., and served psychiatric residences in Maryland, Connecticut and New York. Doctor Binder, a captain when released from service, was in the army 36 month in World War II. He has been certified by the American Board of Psychiatry and Neurology.

Leonard L. Kishner, M.D., Tulsa, has an article on "Some Current Thinking on Infantile Colic" in the August Journal. Doctor Kishner was graduated from Marquette University in 1946. He served his internship and pediatric residency at Michael Reese Hospital, Chicago.

THE PRECEPTOR PLAN*

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My interest in the preceptor plan of instruction came primarily because I served such an apprenticeship under my father. In remembering those times, I recall the vast amount of instruction I received while seeing patients with him and his unbounded patience to ease me over the harder ruts in the road. This experience led to the editorial published in the *Oklahoma State Journal* suggesting such a plan of training. I did not realize such a plan was under consideration —nor did I hope to participate in it. My luck was good and this paper is to bring you a report of stewardship if you will allow me to define steward as a fiscal agent.

The desire to teach is, I presume, strong in all of us. This small voyage as teacher on your faculty has been a happy and full and fruitful one. The senior students I have had have been hard workers, conscientious in the duties delegated to them, willing, and without exception, an inspiration to the entire staff.

The value of preceptor training rests principally in the contact the student has with the patient—his first contact on level footing as a doctor. He learns to know individual patients and their families often through the entire course of an illness. Those problems peculiar to small town practice are with him constantly. He learns, by practice, the greatest lesson in public relations in modern medicine—to be interested in the problems of the sick—to be a good listener. He learns before his internship the arrangement and conduct of an office, the problems of a busy waiting room, how office appointments are arranged, and financial arrangements with the patient.

He has ample opportunity to discuss relevant points in the history, correlation of physical findings and history and most important—what is to be done. Treatment is discussed and the effect of drugs used or other therapy observed on return visits. In the surgical field, one part of the training is an explanation of why surgery is advised, what is planned and what is to be expected. Also it gives us opportunity to explain why in certain conditions and under certain circumstances surgery is not recommended. I want the students to realize early in their experience that a diagnosis is not always possible, that the finding of an asymptomatic fibroid of the uterus is not a demand for a hospital bed, that cholecystectomy is not a cure all for dyspepsia. It is hoped by their contact with patients, they can gain insight into the great number of problems that patients bring to the doctor for which no specific therapy is possible.

In the hospital, the student takes care of minor emergencies and is delegated some responsibility in the care of in-patients. His time is not taken up by histories or routine laboratory work but by observation with members of the staff. Surgical procedures are discussed preoperatively and the student is usually second assistant, sometimes first assistant on minor procedures. Postoperative care is not delegated to him but he helps and observes all postoperative care and all measures carried out are subject to full discussion.

The student learns something of the financial problems of patients, problems of insurance, some details of the business of an office, the cost of drugs and equipment. He meets the banker, druggist, lawyer and learns early the big place he is to occupy in small town practice.

Their deficiencies have been only one if that can be called a deficiency—they sometimes lack a sense of correlation of the vast amount of knowledge they have acquired. Anatomy, even though thoroughly taught, is largely forgotten by the time they reach their senior year. We make every effort to stress the importance of review of anatomy and in a small way, we conduct the review, hoping they may be well prepared before the desperate need arises in their own early surgical experience.

Students come down to us with a wealth of knowledge about abnormal cardiograms, drug dosages, salt reduction diets but no one has correlated this knowledge for him into a good rational method of handling a patient in congestive heart failure.

Every effort is made to encourage the

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student to think in this most important formative year. We do not encourage "pat" ideas in the changing picture of modern medicine. There is yet no procedure or drug that is a cure all for peptic ulcer; radioactive iodine and thiouracil have not solved the problem of goitre and all women with female trouble do not need surgery.

There has been some criticism, I know, that a student should be assigned to a surgeon for preceptorship. I need not answer this criticism because in my own mind I am first a doctor. Since I am a very small surgeon I don't dilute their good teaching much.

The students can tell of the wonderful clinics they have seen, gastric resections, radical breast amputations, pan hyterectomies, but they lack an appreciation and understanding of the multitude of little surgical procedures. The pathologic differences of boils, carbuncles, cellulitis and lymphangitis have either not been emphasized or, like anatomy, forgotten. We try to fill this gap in the preceptorship because it's bread and butter surgery.

One suggestion for the curriculum of the senior year would be a sound film with one of your excellent clinicians as monitor on the subject of history taking. This would be of great value to the student going on an internship and in the correlation or summary of facts of the history, a summary as only Bill Rucks can compose.

Professors in modern medical schools are not close enough to the students. They respond wonderfully if you take time to unbend. They want to feel they have entered on the ground floor of the castle and any veil you can lift from the mystery and magic of medicine will reward your school with better and more human doctors.

If anything is really taught in the preceptorship at home, I suppose we could list:

Work—for we have a duty and obligation to the sick.

Study—for such is the foundation of progress in modern medicine.

Humility—that through life these things credited to us as doctors are not ours alone —we are not and can never be unto ourselves sufficient.

BOOK REVIEWS

THE PHYSICIAN AS MAN OF LETTERS SCIENCE AND ACTION. Thomas Kirkpatrick Monro, M.A., M.D., LL.D. Second Edition, Baltimore, The Williams and Wilkins Company, 1951. Price $4.50.

The mere title of this little volume will interest and stimulate every true physician who has the good fortune to see it. These words from the preface to the first edition should arouse eager interest in the second revised and enlarged edition:

"For many years I have been a collector of data relative to medical men who distinguished themselves in other ways than in the practice of medicine."

What an unpaid debt of gratitude we owe to those who delve into the past for buried treasure in order that we might be informed, inspired and improved.

All who have read Lord Moynihan's charming little book entitled, *Truants, The Story of Some Who Deserted Medicine Yet Triumphed*, will want to read this intriguing volume by the Emeritus Professor of Medicine at the University of Glasgow.

To whet your appetite, consider this from Lord Moynihan:

"A scientific training is useful, not only in the work of an arduous and scientific profession, but in all other callings into which by accident or deliberate intention a man may chance to wander. It has always been one of the salient characteristics of medical men in all countries, and at all times, that they have ardently followed other pursuits than that of their own profession, and have indulged in other forms of culture." Monro adds many names to Moynihan's list.—Lewis J. Moorman, M.D.

TEXTBOOK OF REFRACTION. Edwin Forbes Tait, M.D., Ph.D. 418 pp. illus. W. B. Saunders Company, Philadelphia, 1951.

This book was written primarily for graduate students in ophthalmology, physicians who do some refractions and who are anxious to further their knowledge, and any others who are concerned in any way with vision or ocular efficiency. It is without doubt the most practical book that I have ever read on the subject of refraction and neuromuscular anomalies of the eye.

There is a conspicuous absence of geometrical optics and it is devoid of impractical theories, but it does present a sound scientific basis for the corrective methods recommended. These methods are explained in such a way that the physician may understand them clearly and may see what to do and how to do it. The section on correlation of results is most helpful. It enables one to learn and to correlate results of examinations in a logical order, analyze them, and determine the best program of correction.

The material on the diagnosis and management of subnormal vision is excellent. There are included many new concepts such as multiple pinhole spectacles, theory and practice of cross-cylinders refraction and chapters on skiametry, heterophoria and heterotrophia. he chapters on refraction and muscle anomalies in children should be of interest to pediatricians as well as to those interested in the eye only. Neurologists should find the chapter on small stimulus-response mechanism most interesting.—Ben F. Gorrell, M.D.

EMERGENCY TREATMENT OF SEVERE HEAD INJURIES*

HOWARD LOUIS PUCKETT, M.D.
STILLWATER, OKLAHOMA

In this age of trauma there are not enough neurosurgeons to care for all severe head injuries. This is particularly true in the less densely populated areas where the neurosurgeons are few and far between, and the speed of automobiles is increased to such an extent that each accident is almost certain to produce at least one severe head injury.

As a consequence many general surgeons have been canfronted with grave neurological problems which, a generation ago, they would not have had to solve. It is unfortunate that many approach this unavoidable responsibility with timidity because of the confusion created by conflicting methods of treatment not only reported in the literature, but also taught at various medical schools.[1,2,3,4,5,7,8] Nevertheless the fundamentals are the same everywhere. It is because of the misplaced emphasis on some minor detail of particular interest only to the authority, that the fundamentals are lost to the general surgeon.

It is not the purpose of this paper to replace or improve the literature and teaching of the neurosurgeons, but instead to present the problems and opinions of a general surgeon in the treatment of compound fractures of the skull.

While in the Medical Corps of the United States Navy, 89 cases with severe injuries to the head were reported[9] with a mortality of 10 per cent. After leaving the Navy, similar cases treated in the same manner have not increased the mortality rate. Since this death rate is about the same as reported by neurosurgeons, the basic treatment used is evidently about right. This treatment is to be discussed particularly in regard to the problems of shock, hemorrhage, diagnosis, increased intracranial pressure, dehydration, spinal puncture, debridement, and trephine.

The first complication of compound fracture of the skull is the surgical shock of the patient. But the treatment of this complication is not dramatic enough to satisfy most relatives, whose interference undoubtedly adds to the depth of the shock, and thereby to the high mortality from this condition. Therapy of shock must be prompt and cannot wait while the relatives weep over the patient (Fig. 1), or for the arrival of a neurosurgeon, or for the transfer to a more favorable environment.

Where there is a compound fracture with loss of blood and cerebrospinal fluid, whole blood transfusions are given. Dried plasma alone dissolved in half the usual amount of water can be used in any case with advantage. Oxygen is given for respiratory embarrassment and cyanosis. Mucus accumulations in the throat are sucked out for the same reason. Where sedation is required, paraldehyde by rectum is the drug of choice. This drug has no tendency to produce toxic anoxia of the cerebrum, as do morphine and the barbiturates.

With the exception of the sedation and the problem of fluid metabolism, the shock that accompanies severe head injuries is analogous, as far as treatment is concerned, to that accompanying injury to any other part of the body. The mortality rate is excessive during this stage of treatment, but it can be lowered by immediate attention to the shock alone. A thorough examination, operation, or transfer of the patient by ambulance to a neurosurgeon is to be post-

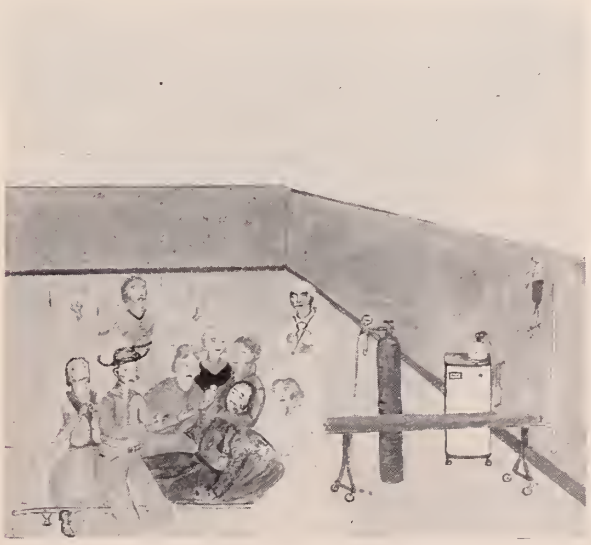


FIG. 1. Interference of Relatives

*Presented at the 1951 Annual Meeting of the Oklahoma State Medical Association.

poned.

After the shock is successfully combated, diagnosis, as a rule, is no more difficult than it would be for a severe injury in any other part of the body. The first question to be answered is whether or not this wound is compound.

Most perforations of the skull are obvious, but others may require a meticulous examination to discover. A small scalp wound with a hematoma may hide an extensive defect in the skull with bone fragments peppered into the cortex; while on the other hand, a massive laceration of the scalp may be present without any skull fracture. Fractures opening into the nasal cavity are often overlooked until an overwhelming meningitis develops. The examination, of necessity, must be thorough.

A patient presenting a large hole through the scalp and skull may require further examination to explain the origin of the hemorrhage, unconsciousness, or paralysis.

Pressure symptoms that develop during the first day are from hemorrhage. After that time, the edema of the brain tissue is usually at fault. The degree of unconsciousness is dependent not on the amount, but on the site of the hemorrhage or injury. A penetrating wound of the cerebellum produces prolonged unconsciousness, while a large defect in the frontal or parietal lobes may leave the patient completely conscious. Consequently a patient may be as severely injured and remain conscious, as one who remains unconscious. The focal signs such as hemiplegia, aphasia, and fixed dilated pupil, also depend on the location of the actual brain damage (Fig. 2). In other words, the extent of the injury to the brain substance itself does not necessarily parallel the symptoms.

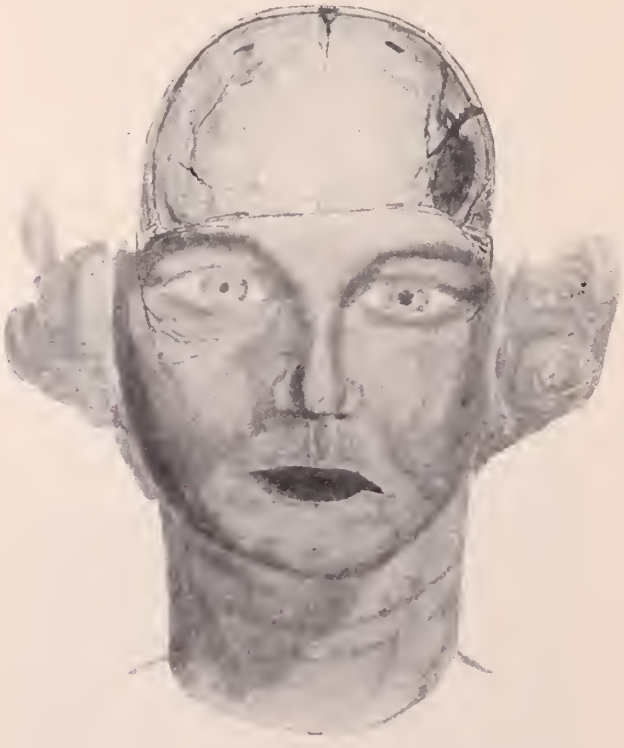


FIG. 2. Comminuted fracture of temporal area with hemorrhage from the middle meningeal artery with facial paralysis and dilated pupil on the same side.

A patient with a hole one half inch wide and an inch deep in his frontal lobe may sit up and show no neurological symptoms, while another with no visible evidence of brain damage may be unconscious, hemiplegic, and be in severe shock. Where the skull defect is large through which the blood and macerated brain tissue can drain, decompression is often spontaneous, the patient remains conscious, revealing few peripheral signs of cerebral damage.

But severe focal signs with marked disturbance in body temperature and respiratory rate indicate a grave prognosis. These grave prognostic signs are not usually found where there is adequate spontaneous decompression, or judicious use of spinal puncture, dehydration, and trephine. Since the patient is improved by dehydration and decompression, whether this occurs through an open wound as a result of injury, or whether instituted as treatment, the sooner the procedure can be accomplished, the more likely the patient is to recover.

Where the wound is open and the focal signs increased in severity, removal of blood clots and detritus by gentle irrigation with physiological saline will often relieve the situation, allowing consciousness, and the body temperature, and respiration to return to normal. Since the irrigation may have to be repeated for hours, a 1000 cc. flask of saline is set up in the same manner as for an intravenous injection, except that the glass tip of an eye dropper is substituted for the needle and is used as a nozzle. This irrigation not only removes blood clots and damaged brain tissue, but potentially infected foreign material. Debridement is avoided except where the decompression is facilitated by it, or where the tissue is obviously devitalized.[10]

When the opening in the skull is small, adequate exposure of the underlying tissue is obtained by rougeuring the edges. Bleed-

ing vessels are tied off with silk or cotton sutures, bone fragments within the cortex are extracted, and tears in the sinus are sutured. If the laceration in the sinus or dura cannot be approximated, the space is covered with a muscle bridge (Fig. 3).

To minimize infection, the lesion is sprinkled with dry penicillin, except over the motor areas, where it is likely to cause a convulsion, and the drug is also given in liberal doses intramuscularly every three hours.

Subdural hemorrhage should be suspected when there is no response to the dehydration, and when neurological signs develop. However, the same signs and symptoms may develop with extradural hemorrhage. The classic syndrome of unconsciousness followed by a lucid interval and then coma, occurs only in the minority of extradural hemorrhages. Increasing signs and symptoms that do not respond to good conservative treatment require immediate exploratory bilateral burr holes to find and stop either subdural or extradural hemorrhage.

Any factor that increases the intracranial pressure should be carefully studied and eliminated, providing the procedure is feasible.

The following case will illustrate what can be accomplished by conservative treatment:

A six year old girl was admitted to the hospital in an unconscious state. According to witnesses, the patient was struck by a train while crossing a railroad track in an automobile. Her uncle, grandfather, and father were involved in the same accident. Her father was dying from a crushed skull, her grandfather died instantly from multiple wounds, and her uncle was dazed—bleeding from the face and nose, unable to relate anything concerning his injury. The child cried out during her examination, but would not respond to questions.

Physical examination revealed multiple lacerations on the forehead and face. Bloody fluid was draining from both nostrils. A hematoma was forming about the right eye and was producing an exophthalmos and hemorrhage through the conjunctiva. The right pupil was larger than the left, but both reacted to light. The ears were intact. Considerable blood was noted in the nasopharynx. The temperature was 100.6 F. The pulse was 126, weak, and irregular, and the respiratory rate was 34. The systolic blood pressure was 104, and diastolic was 64. The

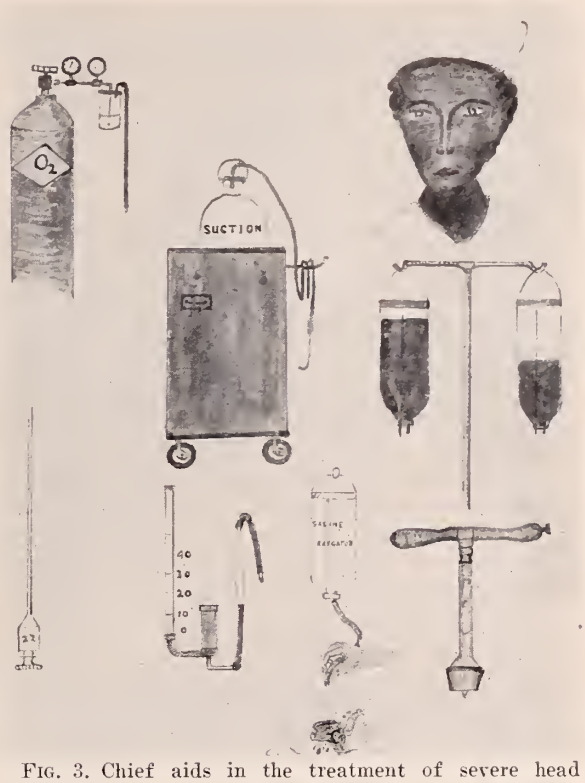


FIG. 3. Chief aids in the treatment of severe head injuries.

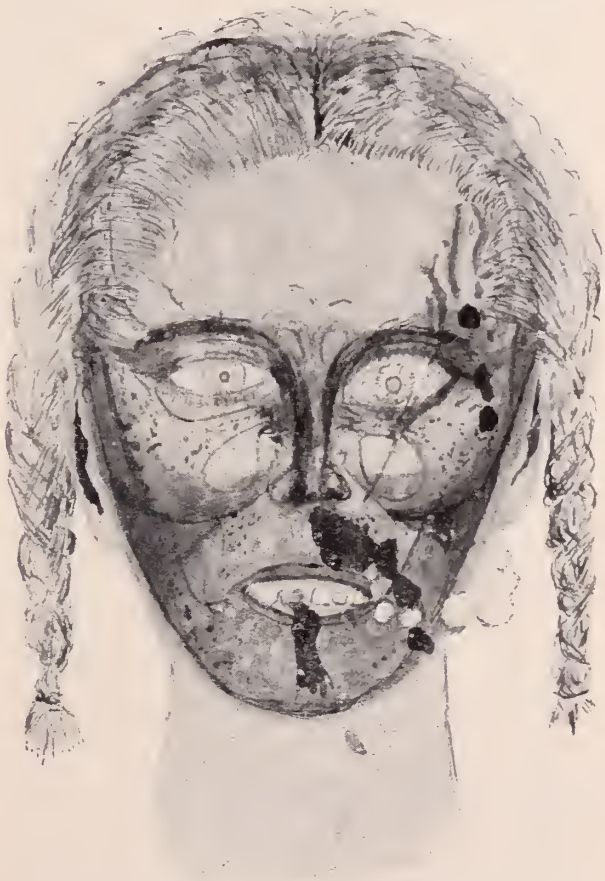


FIG. 4. Fracture, into orbit and nares, exophthalmos, hemorrhage, laceration of forehead, dilated pupil—shown by transillumination of sketch.

neck and thorax were not remarkable. The abdomen was slightly distended. The right elbow was swollen, and deformed, and abnormal in mobility. The deep and superficial reflexes were physiological, except that on stroking the right foot considerable fanning of the toes occurred (Fig. 4).

Dried plasma, which ordinarily was diluted to 500 cc. with sterile water, was diluted to only 250 cc. and was given intravenously. Ten thousand units of penincillin were ordered every three hours as prophylaxis against a meningeal infection. Oxygen was given as necessary for cyanosis and respiratory distress. Mucus was aspirated from the throat. Paraldehyde in two drachms doses was administered by rectum in olive oil for restlessness. A test dose of combined tetanus gas-gangrene anti-toxin revealed marked skin sensitivity, and as a result the prophylactic dose was omitted.

Fifteen hours after the injury the temperature rose to 107.6 F. and was maintained between 105 F. and 108 F. for next six days. After that period, the temperature gradually fell to normal during the next two weeks. At the onset of the fever of 107.6 F. the spinal fluid was under only slight pressure and the cell count was 741 with 99 per cent polymorphonuclears. Smear of the fluid revealed numerous pneumococci, streptocci, staphylococci, and Friedlander's bacilli. Culture of the spinal fluid and blood revealed the same predominating organisms in both. All were sensitive to penicillin in dilutions of 1 to 2500, except Friedlander's bacilli were sensitive to one to 1500 dilutions of streptomycin.

The penicillin was increased to 50,000 units every three hours. Daily transfusions from old individuals, who had recovered from pneumonia or other severe infections, were given in 250cc. doses. Extreme temperatures above 106 F. were controlled with immediate ice packs and cold towels. Daily spinal punctures were done, and 10 to 20,000 units of penicillin were injected into the spinal canal. The cell count gradually decreased and became normal on the seventeenth day of the injury. The spinal fluid culture was normal after the fifteenth day —Friedlander's bacilli were the last to disappear. Blood cultures were negative after the tenth day.

When the temperature returned to normal, x-rays were made of the injured parts. The right olecranon was fractured and displaced proximally. The skull showed comminuted fracture of the base with extension of the fracture lines to both orbits and to the nasal cavity through the ethmoid area.

Examination of the eyes at this time revealed complete bilateral palsy of the sixth nerve. The vision seemed good in each eye and the eye grounds were not impaired. Other cranial nerves were intact. Slight weakness of the left leg was noted and there was fanning of the toes on that side when the plantar surface of the foot was irritated. Other superficial and deep reflexes were not abnormal.

Forty-one days after the injury the patient was able to walk out of the hospital.

Two months later the only evidence of the injury was an internal strabismus of the right eye which could be corrected for brief periods by covering the left eye.

The apparent reason that this patient survived the repeated attacks of extreme temperature was the rapidity with which they were reduced by ice packs and baths. The infection was probably overwhelmed by the temperature, penicillin, blood transfusions, plasma, amino acids—and the immunity which the child was able to develop. The presence of the few neurological signs was likely due to the site of the injury and to the spontaneous decompression through the nasal cavity.

As shown in this case, infection is apt to follow in open head injuries, but with the aid of penicillin as a prophylactic agent, such a severe infection should occur less frequently. Even this one might have been prevented if larger initial doses had been used along with streptomycin to kill the Friedlander's bacilli. No attempt was made to treat the cerebrospinal rhinorrhea, since sterilization of the nasal cavity cannot be attained. It was only a sign of compound fracture through the nose.

SUMMARY

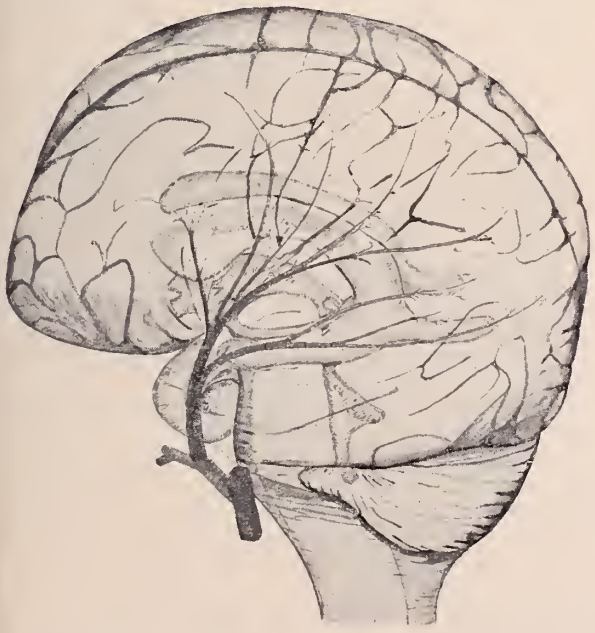
Penicillin applied directly into an open wound in the skull may produce convulsions, especially if the opening is near the motor centers; but it is of advantage to apply the dried powder to the soft tissue outside the skull and to the bone itself. Extensive debridement can be avoided when such a procedure is followed. Only the obvious devitalized tissue need be removed.

Deep placed foreign bodies are better left in place, but shattered bone fragments partially imbedded in the cortex should be

extracted. Bleeding surface vessels are ligated with number 60 cotton suture to prevent leakage of cerebrospinal fluid, providing the edges can be approximated before edema of the brain substance separates the dural tear too far.

Increased intracranial pressure should be controlled. The method of choice initially is the control of hydration. Limit the intake of fluids, use concentrated plasma and glucose intravenously, and administer magnesium sulfate rectally. Lumbar puncture is indicated (Fig. 5).

When a patient does not respond to this treatment, or to spontaneous decompression, an acute subdural hematoma should be suspected. Neurologic signs appear—consciousness fluctuates, and hemiplegia may develop (Fig. 6). If a fracture line is seen in the x-ray in relation to one of the middle meningeal vessels, or one of the large venous sinuses, and the patient has hemiplegia or a dilated fixed pupil, the hemorrhage is probably extradural. When a patient is suspected of having either form of hemorrhage, both hemispheres should be explored with burr holes and the bleeding stopped. If an intracortical clot is found, it should also be evacuated. Merely the enlargment of a compound wound may be sufficient to find the hemorrhaging vessel, to relieve the pressure, arrest the neurologic symptoms, and save the patient.



F|7. 5 In severe head injuries bleeding is apt to occur into the ventricular and cisternal systems as well as from the middle meningeal artery.

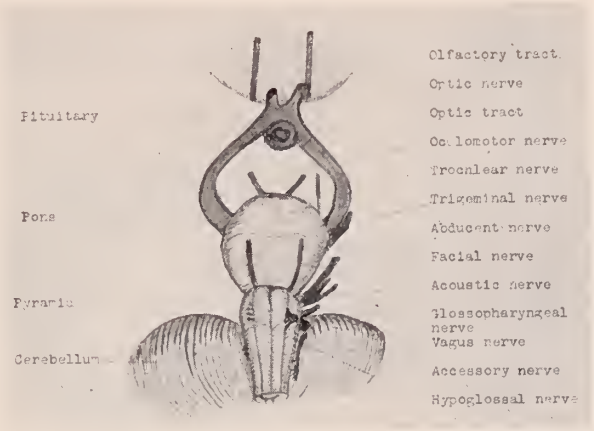


FIG. 6. Worms eye view of the cranial nerves and the base of the brain.

CONCLUSION

It is the duty of the general surgeon to treat severe head injuries. The treatment is an emergency measure and cannot wait a week, a day, or even an hour for the neurosurgeon, if the mortality of this condition is to be reduced. Shock, hemorrhage, and increasing intracranial pressure require immediate attention (Fig. 7). The more severe the case, the easier the diagnosis and the simpler the method of treatment. The severity of the condition emphasizes the signs and symptoms, and points to the shock, the hemorrhage, or the increased intracranial pressure (Table 1). The patient is a poor surgical risk and requires simple, precise methods based on sound physiological principles in order to treat him successfully. Elaborate examination or diagnostic procedure while the patient is in profound shock leads to death (Table 2). On the other hand, giving plasma or doing a spinal puncture will not stop a patient from drowning in his own blood if he is hemorrhaging from his nasopharynx. Nor will the treatment of shock and hemorrhage do much for the patient if he is then left to die later of an increased intracranial pressure.

If the appalling mortality from severe head injuries is to be reduced, it must be done by the general surgeons who see the cases first, and therefore have the best opportunity to save them. The treatment of necessity must be immediate, and carried on constantly until the patient is out of danger.



FIG. 7. Complications of a severe head injury—shock, hemorrhage, loss of cerebrospinal fluid, respiratory difficulty, obstruction in throat, unconsciousness, fragment of bone within brain, convulsion.

TABLE 1. COMPLICATIONS OF COMPOUND FRACTURES

1. Shock.
2. Hemorrhage.
3. Loss of cerebrospinal fluid.
4. Respiratory depression.
 a. Injury to respiratory center.
 b. Cerebral anoxia.
 c. Obstruction in throat and trachea.
5. Perforation of brain.
6. Foreign bodies within brain substance.
7. Hematoma.
8. Edema of brain.
9. Unconsciousness.
10. Paralysis.
11. Laceration of blood sinuses.
12. Convulsions.

TABLE 2. EXAMINATION OF PATIENT WITH COMPOUND SKULL FRACTURE

1. Non-disturbing superficial examination until shock is controlled.
2. Thorough examination after shock. Look for perforation and
 a. Hemorrhage.
 b. Loss of cerebrospinal fluid.
 c. Tears in venous sinuses.
 d. Bone fragments in cerebrum.
 e. Ears, nose, throat, and macerated scalp for hidden perforations.
3. Neurological examination to explain
 a. Unconsciousness.
 b. Paralysis.
 c. Disturbance in body temperature and respiration.
 d. Increased intracranial pressure.
 e. Focal signs as
 Aphasia.
 Dilated pupil.
 Local muscular spasm.
4. X-Ray.
 a. A.P., lateral, and oblique, as indicated by finding.
5. Record frequently temperature, pulse, and blood pressure readings.

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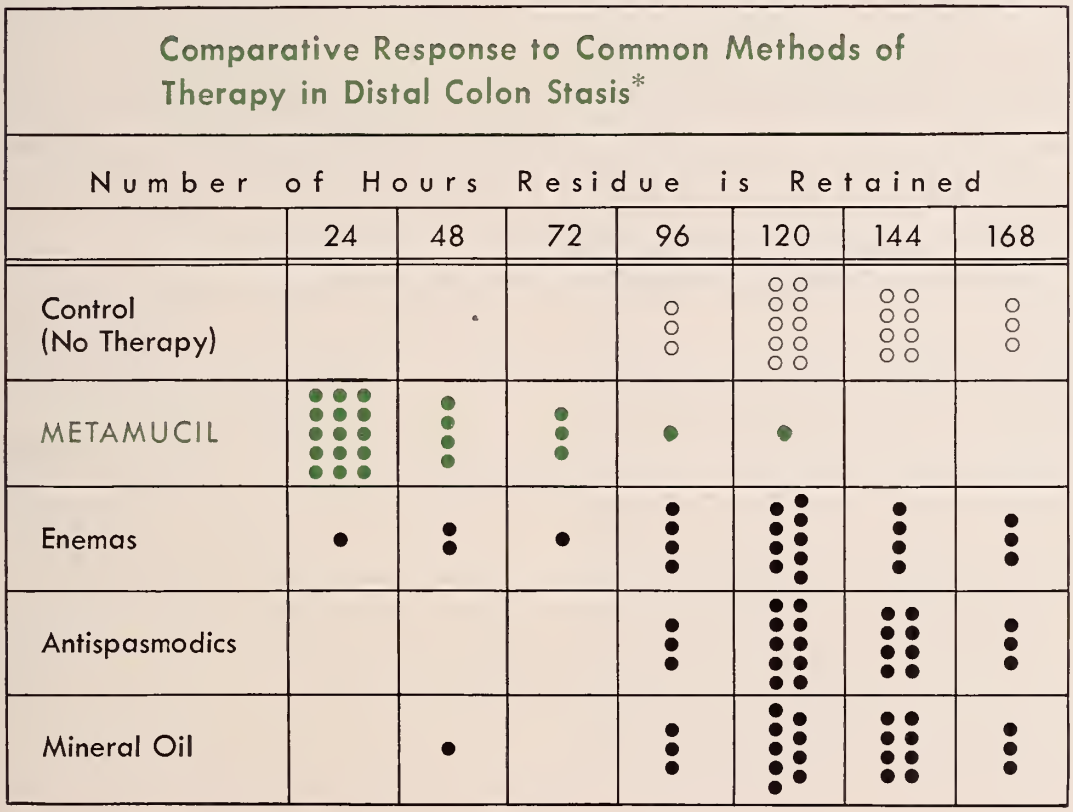
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*Barowsky, H.: A Roentgenographic Evaluation of the Common Measures Employed in the Treatment of Colonic Stasis, Scientific Exhibit, National Gastroenterological Association, Chicago, Sept. 17-22, 1951.

RESEARCH IN THE SERVICE OF MEDICINE SEARLE

President's Page

We profess great love for our profession and on the surface, at least, we appreciate the unique opportunities it affords, both in economic security and as a way of life with an unusual challenge.

Our obligation to honor its traditions and to promote its welfare is overshadowed only by our sacred duty as citizens of a country where citizenship is still priceless.

This election year, with all that the free and secret ballot implies, should be a reminder for all of us to rededicate our lives, our fortunes, and our sacred honor to the duties incumbent upon us as citizens. Without the rights and freedoms granted us by the Bill of Rights, our professional privileges will crumble to dust before our very eyes.

We have too long excused ourselves on the lame theory that our work is too important for us to be active in the affairs of state. It is now incumbent upon us to accept the civic responsibility of good citizenship.

The opportunity to accept this responsibility and a chance to work out our own way of life, to succeed or fail, bequeathed us by our fathers is far too precious to be forfeited. It must be passed on to our sons.

If we cannot say with Patrick Henry, "I know not what course others may take, but as for me give me liberty or give me death," then we may as well pull up stakes and give the country back to the Indians and move in with the Commies.

Alfred R. Suggs

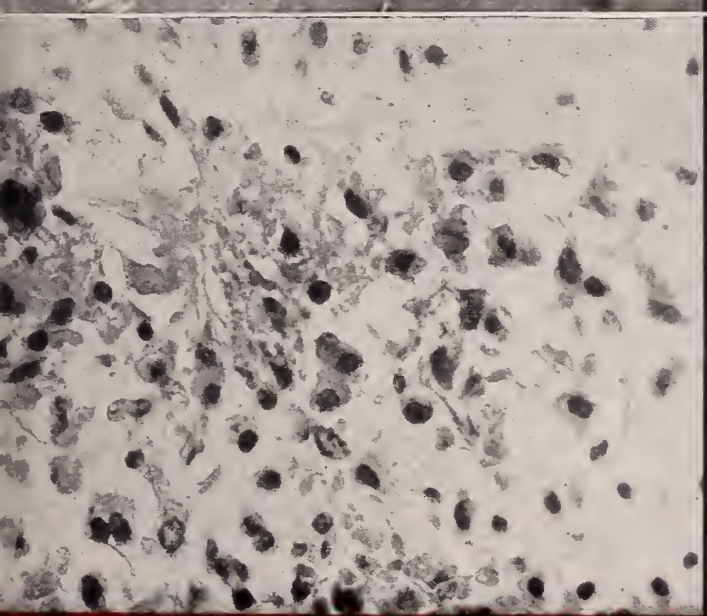
President

response in rheumatic fever



q. Does cortisone influence the heart lesions of rheumatic fever?

a. Early cortisone administration suppresses and in some cases may even prevent serious cardiac damage.



q. What effect does cortisone have on acute rheumatic fever?

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Message From The Dean, School Of Medicine

As Dean Mark Everett is away on a two months Naval Reserve Training Cruise as a representative of the University of Oklahoma and a guest of the Navy, this month's space is turned over to Miss Lila Heck who will tell our readers of the services available through the Medical School Library.

THE MEDICAL LIBRARY

LILA E. HECK, LIBRARIAN

The library of the University of Oklahoma School of Medicine is at last settled in its quarters in the new wing of the Medical School. It's now the showplace of the school.

Physical facilities

The new library occupies nearly four times the floor space of the old. The reading room is almost as large as the former main floor floor-space. It is beautifully light and airy with windows on three sides. A plate glass partition to minimize noise and yet permit some supervision from the charging desk, separates it from the stock, circulation and reference areas. The enlarged space has permitted more convenient arrangement of material. Periodicals for the past four years will be found with the current volumes in easy reach in the reading room.

The main floor stacks contain all books in the library published since 1930 and there is room for new books as they are received.

The reference center is between the charging desk and the reading room. This area contains all the volumes of the *Index Medicus* and the current numbers of the *Excerpta Medica* and other abstracting and indexing services. Older volumes are on nearby shelves. Also shelved in this area are the *U. S. Surgeon-general's Index*, the various loose-leaf sets and the directories, *Who's Who in America*, etc.

A small browsing room on the main floor contains biography, history of medicine, and more or less popular books in all fields. There is good lighting and there are comfortable chairs for leisure time reading. It is hoped that in the future more students will avail themselves of this opportunity to relax and at the same time gain an insight into the history of their profession. It is only as we know the past that we can interpret the present.

Downstairs, there are stacks for the older volumes of periodicals and for the books published before 1932. Also, in these stack rooms, there are carrells (study cubicles) for the convenience of those who wish to work there.

Books and Periodicals

All these physical facilities would be worthless, however, without books and periodicals. The library now receives regularly about 800 periodicals. A number of these were added from funds from the special appropriation for Cancer and Heart Research. Chiefly through gifts, the library has been able to fill many gaps in the periodical files.

The library has a complete back file of and is receiving *Excerpta Medica*, the most complete abstract periodical for clinical medicine. It is published monthly and is in 15 broad subject divisions. A fair percent of the books published each year have been purchased and there is a definite effort to have a representative collection of books in all fields. However, a limited budget sometimes curtails the purchase of books which should be in the library, and second copies are never purchased.



The library is proud of its small collection of "treasure" books—books published prior to 1850. These gifts to the library supply background material in many fields. Among these are such varied titles as Wistar's *System of Anatomy* (1823), Levret's *Observations sur les causes et les accidens de plusieurs accouchemens laborieux* (1750), Burnett's *Practical account of the Mediterranean fever* (1816-The earliest material in the library on Brucellosis), Daniel Defoe's *History of the great plague in London in the Year 1665* (1819), Abernethey's *Surgical Observations on injuries of the head* (1811) and Bell's *Discourses on the nature and cure of wounds* (1795).

In addition to the 32,000 volumes in the library, the resources of the University and A. and M. libraries are readily available through twice weekly delivery service. Also through inter-library loans, material not available locally can always be secured.

Service

Recent progress in medicine is phenomenal. There is more medical writing (and probably, reading) than ever before. This enormous volume of published material makes it no longer possible for the doctor to have all the books and periodicals at hand that he needs and at this point the Library can be of assistance. It belongs to the people of the state and the medical profession should have the most benefit possible from it.

If you need material, ask your local librarian to borrow it for you. If there is no local library, write directly to the Medical Library for it. Large items will be sent Mistletoe Express collect; small items by mail. Naturally, you will be responsible for packing, refunding postage, and returning material on time and in good condition.

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Oklahoma City, Oklahoma

MINUTES OF THE FIRST SESSION

The 56th Session of the House of Delegates of the Oklahoma State Medical Association was called to order at 1:30 P. M., May 18, 1952, in the Hall of Mirrors of the Municipal Auditorium, Oklahoma City, Oklahoma, by the Speaker of the House, Clinton Gallaher, M.D., Shawnee, Oklahoma.

M. B. Glismaun, M.D., Oklahoma City, gave the Invocatiou.

The Speaker, Doctor Gallaher, introduced guests, including Roy Lytle, Attorney, Council for Oklahoma State Medical Association; William Denny and Robert Stover, representiug the Oklahoma Chapter of the Student American Medical Association; Dr. J. J. Montfort, Batesville, Arkansas, Fraterual Delegate of the Arkansas State Medical Association.

Followiug the call-to-order by the Speaker, the Chairmau of the Credentials Committee, Ned Burleson, M.D., Prague, advised the House that a quorum was preseut.

The Speaker asked for the pleasure of the House with regard to the minutes of the last meeting. Forrest S. Etter, M.D., Bartlesville, moved "That the reading of the minutes be dispeused with and that they be approved as published." W. S. Larrabee, M.D., Tulsa, seconded the motion. The motion carried.

Doctor Gallaher announced that the next order of business was the nomination of officers aud declared the nominatious open for President-Elect.

Louis H. Ritzhaupt, M.D., of Guthrie, nominated John McDonald, M.D., of Tulsa. C. W. Arreudell, M.D., Ponca City, seconded the nomination.

At this point R. Q. Goodwiu, M.D., Oklahoma City, asked for the privilege of the floor and commended Doctor McDonald for the untiring effort he had given of this time and ability in the work of the Public Policy Committee during the past year.

John F. Burton, M.D., Oklahoma City, was recognized and nominated James Stevenson, M.D., Tulsa, as Delegate to the A. M. A. for two years.

A. L. Johnson, M.D., El Reno, seconded the nomination.

The Speaker called for nomination of Alternate Delegate to the A. M. A., for Doctor Stevenson. Marshall O. Hart, M.D., Tulsa, nominated Ned Burleson, M.D., Prague.

The next office to be filled was Alteruate Delegate to the A. M. A., for the unexpired term of W. W. Cotton, M.D., of Poteau. R. Q. Goodwin, M.D., Oklahoma City, nominated H. M. McClure, M.D., Chickasha.

Doctor McClure withdrew his name from nomination and nominated Malcolm Phelps, M.D., El Reno, for the office.

The Speaker next asked the Vice-Speaker to take the chair and the Vice-Speaker, W. K. Haynie, M.D., Duraut, stated uomiuations were in order for Speaker of the House of Delegates for a period of two years. Ralph Smith, M.D., Oklahoma City, nomiuated Clinton Gallaher, M.D., Shawnee.

The Speaker resumed the chair and entertained nominations for Vice-President for a term of one year. Louis Ritzhaupt, M.D., Guthrie, nominated James Petty, M.D., of Guthrie, for Vice-President.

The Speaker called for nominations for Vice-Speaker of the House of Delegates. Wilkie Hoover, M.D., Tulsa, nominated Keiller Haynie, M.D., Duraut.

The Speaker declared the House adjourned in order that the repreeutatives of Districts 3, 6, 7, 8, 9, aud 12 might caucus and present nominations for Councilors and Vice-Couucilors. The Speaker pointed out that the terms of Councilors and Vice-Councilors for Districts No. 3-5-9-12, had expired and that vacancies in Districts No. 7 and 8, had been created by the nomination of Doctor John E. McDonald as President-Elect without opposition and Ned Burleson, M.D., of Prague as Alternate Delegate to the A. M. A., without opposition.

The House reconvened and the chair entertained nominations for Councilor and Vice-Councilor from District No. 3. C. J. Roberts, M.D., Enid, nomiuated Bruce Hinson, M.D., Euid, as Councilor and C. M. Hodgson, M.D., Kingfisher, as Vice-Councilor.

The Speaker entertained nominations for Councilor and Vice-Councilor from District No. 6. J. R. McLauchlin, M.D., Oklahoma City nominated R. Q. Goodwin, M.D., Oklahoma City as Councilor and Allen Gibbs,M.D., Oklahoma City as vice-councilor.

The Speaker called for nominations for Councilor and Vice-Councilor from District No. 9 Wm. N. Weaver M.D., Muskogee, nominated F. R. First, Jr., Checotah, as Councilor and I. W. Bollinger, M.D., Henryetta, Vice-Councilor.

Nominations for Councilor and Vice-Councilor from District No. 7, were as follows: Ned Burleson, M.D., nominated W. T. Mayfield, M.D., Norman, as councilor and Paul Gallaher, M.D., Shawnee, as Vice-Councilor.

As John McDonald, M.D., Tulsa, Couucilor from District No. 8, had been previously nominated for President-Elect, it was necessary for District No. 8, to replace him as Couucilor. Walter E. Brown, M.D., Tulsa, nominated Wilkie Hoover, M. D., Tulsa, as Councilor to fill Doctor McDouald's unexpired term.

The Speaker called for nominations for Councilor and Vice-Councilor from District No. 12. O. H. Miller, M.D., Ada, nomiuated J. H. Yeazey, M.D., Ardmore, as Councilor and W. T. Gill, M.D., Ada, Vice-Councilor.

Following the nominatíons for officers, the Speaker, in compliance with the provisions of Chapter III, Section 4, Page 20 of the Bylaws, appointed the following Refereuce Committee

Resolutions Committee—
H. M. McClure, M.D., Chickasha, Chairman
John G. Matt, M.D., Tulsa
Ralph Smith, M.D., Oklahoma City

Sergeauts at Arms—
C. M. Hodgson, M.D., Kingfisher
C. Riley Strong, M.D., El Reno

Tellers and Judges—
H. V. Schaff, M.D., Holdenville

L. C. Kuyrkendall, M.D., McAlester
Joe L. Duer, M.D., Woodward

Constitutiou and Bylaws Committee—
J. E. Highland, M.D., Miami
Wm. N. Weaver, M.D., Muskogee
Elmer Ridgeway, M.D., Oklahoma City

The Speaker stated that the next order of business had to do with the report of the officers. He called on James Stevenson, M.D., Delegate to the A. M. A. Doctor Stevenson gave a brief report as to what had been done during the past year and made predictions as to what might happen at the A. M. A. meeting in Chicago next month, which included the abolishment of A. M. A. fellowship classification.

The Speaker then called on John Burton, M.D., Delegate to the A. M. A., who substantiated Doctor Stevenson's report.

The Speaker then called on a representative from each councilor district for a report from his district where the report had not been published in the Journal.

District No. 1—Report published.
District No. 2—Councilor advised they had no report.
District No. 3—Report published.
District No. 4—In the abseuce of O. G. Newman, M.D., Councilor. L. R. Kirby, M.D., of Cherokee, reported.
District No. 5—A. L. Johnston, M.D., El Reno, reported.
District No. 6—R. Q. Goodwin, M.D., reported.
District No. 7—Report published.
District No. 8—John McDonald, M.D., reported.
District No. 9—Shade Neely, M.D., reported.
District No. 10—E. H. Shuller, M.D., reported.
District No. 11—Report published.
District No. 12—J. H. Veazey, M.D., Ardmore, Councilor, not present. W. T. Gill, M.D., Ada, reported.
District No. 13—H. M. McClure, M.D., reported.
District No. 14—L. Gordou Livingston, M.D., reported.

Following these reports the Speaker accepted an assignmeut from the Council and read a telegram from Elmer L. Henderson, M.D., Chairman of the American Medical Education Foundation, with regard to contributions to the Foundatiou.

The Speaker called on L. C. McHenry, M.D., Presideut, for the report from Council. Doctor McHenry made the following report

COUNCIL REPORT

"The Council by, the Constitution and Bylaws, is charged with the responsibility of giving practical force and effect to the mandates and policies of the Association as determined by the House of Delegates. However, since the House of Delegates meets but once a year, the Council also has iuterim respousibility and authority under the Bylaws to determine and develop policies when such actions become necessary between sessions of the House of Delegates.

Because of the general unrest of the times and because many types of external pressure have beeu brought to bear upon the profession duriug the past year, it has been necessary for the Couucil to take action in numerous matters effecting the entire membership. This report is designed to inform the membership, as represented by the House of Delegates, of the activities of the Council and the various Committees during this past year. The report includes several recommeudations for action by the House of Delegates which is the governing body of the Association.

At the 1951 annual meeting the House of Delegates changed the Committee structure of the Association in order to coordinate certain related activities, to eliminate certain inactive committees and to obtaiu more widespread knowledge of Associatiou activities among the membership at large. An attempt has been made to have representation of each Councilor District and at least one member of the Couucil ou each of the major committees.

Due to the fact that this Committee reorganization has been accomplished, this report of the Council will be less extensive than in past years. However, your Council charges the delegates to this meeting to pay close attention to the reports of the Committees in order that they may fully understand the import of the responsibilities that the House of Delegates is delegating to the Council and the Committees of the Association.

The Committees and Subcommittees which will report at this meeting are:

1. Public Policy
2. Public Health
3. Organizational Functions
 Subcommittee on Malpractice Insurance
 Subcommittee ou Budget and Office Organization
4. Postgraduate Medical Education
5. Military Service
6. Grievance Committee

The Council has reviewed the reports of these Committees and recommends the adoption of their reports.

MEMBERSHIP

The Committee on Organizational Fuuctions will point out to the House of Delegates the decrease iu reveuue to the Association that is being brought about by the increase in number of Life and Honorary Members. Your Council is not questioning the wisdom of such elections except to the extent that the House of Delegates must recognize that there can be no material reduction in dues when there is a sizeable revenue loss by such elections. There are now 128 Life and Honorary members and 44 more are being recommended for election at this meeting.

FINANCES

The financial structure of the Association remains sound, although its structures has uot been strengthened over the past few years. Your Council is fully awarė of the increase in office work that has been occasioned by the levying of the A. M. A. dues on the membership and the increase in functions of the Association Committees. Your Council is not unmindful of the changes that will be recommended by the Committee on Organizational Functions concerning the setting of dues and the creation of a budget but after full consideration of the facts, believe it is the only practical solution to a complicated problem.

PROFESSIONAL ETHICS

Your Council has been repeatedly reminded that the Association has been criticized for protecting incompetent, unethical aud even dishonest members to the detriment of the medical care of our patients, eveu to the extent that patients' lives are endangered because medical organizations do not police their owu membership. Your attention is called to the activities of the Grievance Committee. The Council feels that these activities should be commended and encouraged. The Council also recommends passage of an Amendment to the Bylaws to the following effect—that membership in the County Medical Society and State Medical Association of auy member whose Federal Narcotic Permit has been revoked for cause shall be automatically terminated by

such revocation. The State Liceuse to practice medicine may uot be affected by such revocation but the Council feels that a member who has suffered such revocation should not be upheld to the public as a member of our Association and equal with all other members.

AMALGAMATIONS OF COUNTY SOCIETIES

Your Council has strongly urged over the years the establishment of District Societies to serve the members of the profession in Couuties not having sufficient physiciaus to maintain an active society. It is for this reason that the following applications for the establishment of district societies is recommended by the Council.

Cherokee-Adair
Cleveland-McClain

ALTERNATE DELEGATES TO A. M. A.

It will be necessary to elect an Alternate Delegate to the A. M. A. iu place of W. W. Cotton, M.D., Poteau, Oklahoma, because of an official A. M. A. rule that delegates and alternate delegates must have been Fellows of the A. M. A. for preceding two years. Doctor Cotton cannot be seated even though the Fellowship may be abolished this year.

PREPAID VOLUNTARY HEALTH INSURANCE

The Boards of Trustees of both Blue Cross and Blue Shield as well as the commercial companies, have repeatedly pointed out that the rate of admissions, medical fees, and length of hospital stay of persons holding prepaid insurance contracts is solely in the hands of the physicians and that unless the physician acts as the comtroller of these plans, they will either fail or the premium to be charged to the public will become so high that the substitutiou of government insurance on a compulsory basis will be an economically advantageous step for Mr. and Mrs. America. No plau or insurance company has, so far as we know, attempted to dictate to physicians how they shall practice medicine nor which patients they shall admit into hospitals. However, comparative figures indicate unmistakably that many patieuts are being admitted to hospitals for medical care who would not have been admitted at all if they did not have insurance and who have couditions which could be adequately and properly treated iu the patieuts' home. Physicians must recognize that they hold a blank check for the funds of these plans and that through their actions the plans will either succeed or fail.

MALPRACTICE INSURANCE

Subcommittee on Malpractice Insurance

The subcommittee on Malpractice Insurance will report on this activity of the Association and your Council concurs in its report. It is your Council's firm opinion that the members of the Association are more interested in adequacy of the protection they will receive under malpractice contracts thau they are in the premium paid so long as the latter is within reasonable bounds. It is your Council's recommendation that the Subcommittee dealing with this problem be commended for its work and urged to contiuue its investigation into available coverage before making a final recommendation to the membership.

BECKHAM COUNTY LAWSUIT

The Council wishes to report the couclusion of the lawsuit brought by the Farmers Union Cooperative Hospital against the Beckham County Medical Society which has been settled out of Court. The settlement of this suit meets the full approval of the membership of the Beckham County Society and copies of the settlement have been sent to your Councilors. The cost of the suit, which this House of Delegates assumed in its last meeting in Tulsa has amounted to $12,575.49, and payment has been approved by the Council. It is the feeling of the Council that this matter should be a closed chapter iu the history of medicine in Oklahoma and that no further commeut should be made.

ANNUAL MEETING

An invitation will be extended to this House of Delegates for the next meeting of the Association to be held in Tulsa. Certain factors concerning the next meeting will be presented by the Tulsa Couuty Society. It is the opinion of the Council that the meeting should be alternated between Oklahoma City, and Tulsa, but that the House of Delegates should bear in mind certaiu singular factors that must be considered in the manner in which these meetiugs are promoted on the basis of the facilities that are available.

Your Council has invited the Student American Medical Association of the Oklahoma University School of Medicine to send two representatives to the House of Delegates Meetings.

LIFE AND HONORARY MEMBERSHIP

Your Council has already referred to the problems that are inherent in the awarding of Life and Honorary membersships.

The following nominations have been received and the Council recommends their election:

Life Membership

W. T. Andreskowski, M.D.	Elk City
Udonna C. Boon, M.D.	Chickasha
Leo F. Cailey, M.D.	Oklahoma City
Wm. H. Cook, M.D.	Chickasha
Thomas B. Coulter, M.D.	Tulsa
George M. Davis, Sr., M.D.	Bixby
John L. Day, M.D.	Woodward
D. S. Downey, M.D.	Chickasha
Thomas H. Flesher, M.D.	Edmond
H. R. Haas, M.D.	Sapulpa
L. A. Hahn, M.D.	Guthrie
Richard R. Johnson, M.D.	Sand Springs
William LeBlanc, M.D.	Ochelata
D. W. LeMaster, M.D.	Wayne
S. B. Leslie, M.D.	Okmulgee
J. C. Matheney, M.D.	Okmulgee
W. C. Mitchener, M.D.	Okmulgee
Silas Murray, M.D.	Tulsa
Daniel Perry, M.D.	Tulsa
Robert E. Lee Rhodes, M.D.	Tulsa
Winnie M. Sanger, M.D.	Oklahoma City
Joseph G. Smith, M.D.	Bartlesville
L. M. Westfall, M.D.	Oklahoma City
C. O. Williams, M.D.	McAlester

Life Membership (Temporary Provisions)

H. D. Boswell, M.D.	Henryetta
Elizabeth Chamberlain, M.D.	Bartlesville
J. B. Clark, M.D.	Coalgate
J. E. Cochran, M.D.	Byars
Robert D. Cody, M.D.	Ceutrahoma
Emory S. Crow, M.D.	Oulestee
Henry A. Ellis, M.D.	Kiowa
Alfred H. Hathaway, M.D.	Mountain View
Finis W. Henderson, M.D.	Tulsa
Walter Johuson, M.D.	Ardmore

J. L. LeHew, M.D. (Sr.) Pawnee
Silas H. Mohrman, M.D. Tulsa
L. C. Presson, M.D. Tulsa
M. B. Scott, M.D. (Deceased) Delaware
Bartou H. Watkins, M.D. Hobart
Llewellyn G. Wolf, M.D. Okarche

Honorary Membership

Finis W. Ewing, M.D. Muskogee
George A. LaMotte, M.D. Oklahoma City
James F. McMurry, M.D. Sentinel
Horace Reed, M.D. Oklahoma City
Henry K. Speed, M.D. Sayre
L. S. Willour, M.D. McAlester

Associate Memberships

Mark R. Everett, Dean, University of Oklahoma School of Medicine

Harold A. Shoemaker, University of Oklahoma School of Medicine

Arthur A. Hellbaum, University of Oklahoma School of Medicine.

The Council, after a very satisfactory experience with the legal firm of Keaton, Wells, Johnston and Lytle during this past year, and realizing the necessity of legal advice on many matters concerning the activities of the Association has decided to employ this firm of attorneys as legal counsel for the Association on a retainer basis.

The Council has appropriated a sum of money for the use of the archivist of the University of Oklahoma Library in a program for the collection of all the records which can be obtained regarding the practice of medicine in Oklahoma. Members are urged to cooperate in helping this program so that many old records which might otherwise be lost may be preserved for posterity and which may someday be necessary in writing a history of medicine in Oklahoma.

The Council has discussed the advisability of holding an annual meetiug for county and district society officers for purposes of indoctrination and information. It was felt that such a meeting would be of very considerable benefit in the transaction of both component society and state association business. The council refers the decisions as to whether such a meeting shall be held to the House of Delegates.

In concluding this report the Council again calls to your attention that it has been necessary for it to determine many matters of policy during this past year, that a major portion of the activities of the Association is carried out by the newly organized Committees, and that in approviug and adopting this report, you approve of the policies mentioned herein. Your attention is especially called to the report of the Sub-Committee on Budget and Office Organization. This Committee report sets the dues for the calendar year of 1953, and will change the general financial policy of the Association.''

At the conclusion of the Report the Speaker asked the house if they wished to accept the report as a whole. I. W. Bollinger, M.D., Henryetta, moved: ''That the report as a whole be accepted.'' Doctor McDonald seconded the motion. The Speaker suggested that action on the Council report be postponed until the House had heard the reports of the Committees. The motion was withdrawn and it was decided to delay action on the report.

The next order of business was a report from the Scientific Work Committee. In the absence of C. M. O'Leary, M.D., Chairman of the Committee, Doctor McHenry made a brief report and submitted the scientific program for the meeting in lieu of a report.

Following this C. M. Bielstein, M.D., Chairman of the Public Health Committee gave the following report:

ANNUAL REPORT OF THE PUBLIC HEALTH COMMITTEE

The Public Health Committee of the Oklahoma State Medical Association is one of the six large Committees created by action of the House of Delegates at its Annual Meeting in May, 1951. This Committee concerns itself with all phases of Public Health that concern the Oklahoma State Medical Association. The Committee is composed of thirteeu members, one from each Councilor District, except District No. 11, who are as follows:

Felix Adams, Nowata, Oklahoma
Glen W. McDonald, Pawhuska, Oklahoma
Paul Champlin, Enid, Oklahoma
M. H. Newman, Shattuck, Oklahoma
Wilbur F. Bohlman, Watonga, Oklahoma
Ned Burleson, Prague, Oklahoma
R. W. Goen, Tulsa, Oklahoma
R. N. Holcombe, Muskogee, Oklahoma
Forrest P. Baker, Talihina, Oklahoma
James T. Godfrey, Ardmore, Oklahoma
Arthur Hoyt, Chickasha, Oklahoma
Bill Bernell, Hobart, Oklahoma
C. M. Bielstein, Oklahoma City, Oklahoma.

Appointments by the Presideut were completed and the acceptance received by October 1, 1951. It was the Council's idea that this Committee would remain intact and supervise all work related to Public Health. In addition it was considered advisable that sub-committees be appointed to study the more important phases of the work and to act under the supervision of the Public Health Committee. Under the above plan of organization, the following sub-committees have been appointed, are being appointed, or will be appointed:

(a) Sub-Committee on Rural or Community Health
(b) Sub-Committee on School Health
(c) Sub-committee on Industrial Health
(d) Sub-Committee on Cancer
(e) Sub-Committee on Nutrition
(f) Sub-Committee on Infant and Maternal Mortality
(g) Sub-Committee on Blood Banks

All of the Sub-Committees listed above are active at the present time except that on Blood Banks and Industrial Health.

The activities of the Public Health Committee this year were somewhat delayed by the lack of material and information from former years and because of the date at which the Committee was completed. However, it is our feeling that considerable has been accomplished and even more is being attempted. The following paragraphs will give in resume the activities of the Public Health Committee during the year ending June 1, 1952.

One of the most important and even troublesome problems that confronted the Committee was and is community or rural health as it pertains to the State of Oklahoma. A plan was devised whereby the Public Health Committee and its Sub-Committees on Rural Health would take an active part in the solutiou of the problems at the state level. It was thought that, by our active participation at the state level, a great many of the problems involviug local communities could be prevented or more easily solved. This plan or program was presented to the Council on April 6, 1952. Final action by the Council was delayed until its meeting on May 17, 1952. A copy of the report to the Council is iucluded with this Annual Report.

A second activity by the Public Health Committee as regards Rural Health was approval of an agreement with the Editor of the Oklahoma Farmer-Stockman whereby he has agreed to publish articles written by various physicians who are members of the Oklahoma State Medical Association. These articles are those thought to be of interest to the rural public. The subjects have been selected and physicians are being asked to write specific articles at the present time. The series of articles should initiate their appearance iu the September, 1952 issue of the magazine.

The Council, at is October 1951, meeting approved the appointment of a Sub-Committee on Blood Banks. It was the desire of the Council that the functions of the Sub-Committee be in the field of advise and promotion as it deemed proper and expedient. At the time of this action there was considerable activity in the procurement of blood for defense purposes. It was considered advisable to delay the appointment of the Sub-Committee until such activity had abated since to the Chairman's knowledge, our assistance had not been requested. It was further the desire of the Chairman that such a Sub-Committee should not appointed if those interested in defense procurement might consider it an interference.

The Sub-Committee on School Health has been appointed and is in the process of obtaining information on the problems of School Health in each District. When this information is obtained, the Sub-Commitee will formulate plans which will be presented to the eutire Public Health Committee for its approval. The Public Health Committee, acting with the Oklahoma Advisory Health Council and the Oklahoma School Administrators Association held a conference on School Health at Norman, Oklahoma, in September 1951. The meeting was considered a success although there were few in attendance from the medical profession. We have been asked to participate in a similar meeting in September 1952. It is hoped that the recommendatious of the Sub-Committee on School Health can be obtained in sufficient time to make the future meeting more interesting to those in the private practice of medicine.

The Sub-Committee on Industrial Health is being formed for the purpose of gathering information that concerns Industrial Health in the State of Oklahoma. It is thought by many that with the gradual but steady increase in industry over the state, such a Sub-Committee will play an important part in helping to guide the approach of the State Association to problems of Industrial Health.

The Sub-Committee on Nutrition was appointed after the State Medical Association was approached by the Oklahoma Diebetics Association as to the advisability of preparing a simple, efficient, diet manual which would be made available to physicians and hospitals over the state. The principal purpose of such a manual would be to help in the standardization and simplification of diets and to present them in an easily understandable form. The Sub-Committee on Nutrition is, at the present time, assisting the Oklahoma State Dietitians Association in preparing the material to be included in the manual. According to present plans the publication will be ready for printing and binding shortly after June 15. As soon as these manuals are ready for distribution, each member of the State Association and each Hospital in Oklahoma will be given an opportunity of obtaining a copy. The Public Health Committee and the Sub-Committee on Nutrition wishes to express our appreciation to the Oklahoma State Dietitians Association for the cooperation, and speed of actions that its members have shown.

At its meeting on March 23, 1952, the Publie Health Committee voted to ask the House of Delegates to consider the adoption of a budget for the use of the Committee. Since this is the first year of operation for the Committee, it is difficult to reach any accurate estimate. Added to our inexperieuce in such matters is the fact that no information is available as to how extensive a program the members of the State Association wish to promote. Under these circumstances, a program for 1953 would contain principally the costs of obtaining information. It is generally felt that attendance at regional and national conferences on specifie subjects of Public Health interest is the most successful method of gathering material used to foster and promote programs on the State level. With this in mind the following meetings or conferences are listed as possible sources of information:

(1) School Health—Two Conferences
(2) Natioual Conference on Rural Health
(3) National Tuberculosis Association
(4) National Association of Blood Banks
(5) Diabetes Association
(6) Industrial Health Conference
(7) National Public Health Association
(8) Cancer Society (National)

Since the original report was prepared, the President has authorized our participation in the School Health Conferences at Norman, Oklahoma, on October 2, 3, and 4. It is considered advisable that a portion of the program be designed to include physicians only. Accordingly, the afternoon of the first day will be devoted to discussions on the problems of School Health as they concern the private physicians. Also the morning of the last day will be devoted to a discussion, on the part of the attending private physician, of the program as it has been presented. Speakers on these two portions of the meeting will be principally those who have considerable knowledge and understanding as regards both School Health and Medical Practice.''

At the conclusion of the report and following some discussion, W. S. Larrabee, M.D., Tulsa, moved: ''That the Report be accepted.'' Motion seconded and carried.

Next on the agenda was a report from the Public Policy Committee. John McDonald, M.D., Tulsa, made the following report:

REPORT OF THE PUBLIC POLICY COMMITTEE

The Public Policy Committee, made up of the following members, represents two committee members from each of the six congressional districts of the state of Oklahoma, as reapportioned by the last session of the legislature, and submits the following report:

1st. Cong. Dist.—John E. McDonald, Tulsa, Chairman
'' '' '' E. Evans Talley, Enid
2nd Cong. Dist.—H. C. Weber, Bartlesville
'' '' '' W. N. Weaver, Muskogee
3rd Cong. Dist.—C. E. Lively, McAlester
'' '' '' Thornton Kell, Ardmore
4th Cong. Dist.—C. A. Hicks, Holdenville
'' '' '' Louis H. Ritzhaupt, Guthrie
5th Cong. Dist.—Malcom E. Phelps, El Reno
'' '' '' John Records, Oklahoma City
6th Cong. Dist.—Wayne A. Starkey, Altus
'' '' '' E. A. McGrew, Beaver

E. H. Shuller, McAlester, Representing Council Ex-Offiicio

Your Committee has held six meetings since the last meeting of the House of Delegates. This does not include meetings attended by individual committee members with other organizations and government units, or

meetings of sub-committees with other groups interested in the health, welfare or economies of the public as a whole.

Your Committee at the organizational meeting subdivided its activities into 4 divisions as follows:

1. Newsletter, Pamphlets and News Releases — John Records, Chairman.

2. Radio and Visual Education—Dr. W. N. Weaver, Chairman.

3. Physicians, Allied Professions, Hospitals and Prepaid Insurance Plans—Dr. E. Evans Talley, Chairman.

4. Legislation and Elections — Dr. Malcolm Phelps, Chairman.

The nomenclature of these sub-committees speak for themselves and this report will not attempt to detail all of the activities in which each sub-committee has participated, but more particularly will give only the highlights.

Newsletters-Pamphlets and News Releases

Beginning the latter part of 1951, the Committee has reinstituted the Newsletter on a monthly basis, although in the interest of economy, the letter is written only when sufficient important releases not otherwise giveu publicity is made available to the Committee. The letter and pamphlets have a mailing list of approximately 2500. This includes not only the membership but the Auxiliary and it is contemplated adding the members of the Oklahoma Chapter of the Student American Medical Association. The cost of the newsletter without the addition of the student group is approximately $125.00 an issue. Most pamphlets issued with the letter are received from the A. M. A. and other sonrces without cost. A few of special importance have been purchased.

Radio and Visual Education

The Sub-committee on radio and visual education has continued its exteusive programs which were in operation at the time of the Committee's establishment. "To Your Health," a 15 minute movie short emphasizing the advantages of the free enterprise system of the practice of medicine, has been presented to the public during the year in 51 theatres in the state and has played to a total certified attendance of 41,878 at a cost to the Committee of $510.00.

"Tell Me Doctor," the five minute radio program made available by the Committee to the Radio stations of the state for the last four years, is now being broadcast on six Oklahoma stations and through a cooperative arrangement with the Arkansas State Medical Society on one station in Fort Smith, Arkansas. The cost of this series has amounted to $600 during the past year for the transcriptions and transportation. While it is not possible for the Committee to accurately estimate the listening audience, the number of requests for copies of the script of these programs which are received in the Executive Office and by sponsors clearly indicate that this series is an effective Public Relations medium.

The Committee recognizes the possibilities of television and it is hoped that some use of this medium can be made during the coming year.

One exhibition for presentation to the lay-public has been utilized during the year by the committee and an additional exhibition explaining the need for a medical Examiners System in Oklahoma is in the planning stage.

Physicians, Allied Professions, Hospitals, Prepaid Insurance Plans

This sub-committee has met with representatives of the Oklahoma State Osteopathic Association in an effort to work out a legislative program governing the healing arts that would be satisfactory to all concerned. To date little success from the conference has been evident.

The committee has likewise been confronted with pressure from groups in the healing arts to give its sanction to the payment by Blue Shield of their fees for services rendered Blue Shield members. The Committee has not favorably considered these requests.

The Committee has likewise been approached by the Oklahoma Accident and Health Association for a meeting to discuss common problems such as surgery schedules, claim blanks, claim procedure, contract coverage, etc. It was not possible for this meeting to be arranged prior to the meeting of the House of Delegates but a subsequent report will be made to the Council.

The attention of the House of Delegates is also directed to the recent pronouncement by Blue Cross and Blue Shield concerning the manner in which it must have the cooperation of the physicians and hospitals if it is to maintain a premium schedule that the public can afford to pay.

Legislation and Elections

It is unnecessary to emphasize the importance of the coming local, state and national elections. Candidates' attitudes on vital issues will be sent to the membership in due time and when available. It is important, however, that each physician, members of his family, and his employees be registered to vote. The Auxiliary is planning in cooperation with the Committee a vote registering campaign and the cooperation of all physicians is important if the campaign is to succeed.

National legislation under the present administration remains the same but is now being high-lighted by Federal financial aid to medical education and hospitalization benefits for all persons over 65. There is no indication there will be an abatement of this type of social legislation.

Ou the state level the Legislative Council of the Oklahoma Legislature has been working on several bills of interest to the profession. It can be reasonably prophesied that a general rewriting of the state narcotic law will be attempted. Your Committee has appeared before the Legislative Council on this subject and has approved the bills as written by the Legislative Council. The Medical Examiner system to replace the present Justice of the Peace acting as Coronor system is receiving much study by the Council and the Oklahoma Bar Association. From present indication it will be favorably recommended.

The problems inherent with the development of the Industrial Commission over the years have also been a matter with which the Committee has been concerned and on which there have been two meetings with the Legislative Council, although no definite recommendations have been made the possibility of legislation in this field is very good.

Your Committee feels that it cannot anticipate the problems that will come before it in the next year due to the change that may be brought about in the Natioual Administration aud the state legislature.

As a summary your Committee would point out that it feels that it must continue its work in the following fields:

1. Elections
2. Legislation
3. Inter-professional Relations among branches of the healing arts.

LIBRARY OF THE COLLEGE OF PHYSICIANS OF PHILADELPHIA

4. Promotion of the Student American Medical Association
5. Professional Relationship with Oklahoma State Nurse Association and allied professions.
6. Problems between hospitals, physicians annd voluntary prepaid medical and hospital care plans.
7. American Medical Association Education Foundation
8. Press Relations
9. Radio and Television
10. Visual Education
11. Exhibits for public audiences

Your Committee pledges its untiring work to these ends.''

At the conclusion of this report a discussion was held, during which Doctor McDonald advised that the Committee was satisfied that more effort would have to be made in the respect to educating the public and the profession with regard to the problems of Blue Cross and Blue Shield.

W. S. Larrabee, M.D., moved: ''That the report of the Public Policy Committee be accepted.'' Doctor Goodwin seconded and the motion carried.

At this point Marshall O. Hart, M.D., Tulsa, moved: ''That a telegram be sent from the House of Delegates of the Oklahoma State Medical Association to the Oklahoma legislators in Washington, expressing our opposition to House Bill No. 7800. Alfred R. Sugg, M.D., seconded the motion. The motion carried.

Following this C. E. Northcutt, M.D., Ponca City, reported for the Organization Committee, as follows:

REPORT OF COMMITTEE ON ORGANIZATIONAL FUNCTIONS

Your Committee ou Orgauization Functions has had delegated to it by the Couucil the following activities:

1. Budget and Executive Office management.
2. Organization Insurance Programs.
3. Membership.

This Committee, as is the case of all other Special Committees of the Association under the revised comimittee set-up, has representation from each of the fourteen councilor districts. The membership of the Committee is as follows:

Chairman—C. E. Northcutt, M.D., Ponca City
District No. 1—C. L. Johnson, M.D., Bartlesville
District No. 2—C. E. Northcutt, M.D., Ponca City
District No. 3—John R. Taylor, M.D., Kingfisher
District No. 4—Rhonald Whiteneck, M.D., Waynoka
District No. 5—Joseph T. Phelps, M.D., El Reno
District No. 6—W. W. Rucks, Jr., M.D., Oklahoma City
District No. 7—Horton Hughes, M.D., Shawnee
District No. 8—Ralph McGill, M.D., Tulsa
District No. 9—J. H. Reynolds, M.D., Muskogee
District No. 10—E. D. Greenberger, M.D., McAlester
District No. 11—W. A. Hyde, M.D., Durant
District No. 12—Donald J. Wilson, M.D., Pauls Valley
District No. 13—Wm. R. Cheatwood, M.D., Duncan
District No. 14—Aubrey E. Stowers, M.D., Sentinel

Due to the scope of the Committee's functions, it was felt prudent to appoint sub-committees to consider the special problems involved in the matter of the Budget and Executive Office Management and the Association's Insurance Programs. These sub-committees are as follows and they will present their own portions of this report: Insurance Committee, W. W. Rucks, Jr., M.D., Chairman; Budget and Executive Offiice Management, C. R. Rountree, M.D., Chairman.

Concerning membership in the Association, your Committee desires to make certain observations to which it believes the House of Delegates must give careful consideration.

The total membership of the Association has been steadily gaining for approximately 10 years. The membership today, including Life and Honorary members is 1443 with 47 Life and Honorary applications to be acted upon at this session of the House of Delegates. However, your Committee must report that members paying either full or half dues has decreased while the number of Life and Honorary members has shown a rather marked increase. This statement by the Committee should not be interpreted as a reflection on the election of Life and Honorary members by the House of Delegates but more particularly to bring to your attention that in the election of non-paying memberships, the Association in some instances loses dues revenue that must be made up elsewhere.

Your Committee urges each member of the Association to give careful consideration to the report of the sub-committee on Budget and Executive Office Management.

Your Committee would like also to comment that it is its firm opinion that many County Societies should show a more aggressive attitude in not only promoting its County Medical activities but in increasing its membership from among palified members of the medical profession. There should not be a single physician in any county who is qualified for membership who is not a member of his constituent society.

As chairman of the Committee I should now like to request the Speaker to recognize Doctor Rucks aud Doctor Rountree for their portions of this report.''

The Speaker recognized W. W. Rucks, M.D., Oklahoma City, Chairman of the Sub-Committee on Malpractice, who gave the following report:

Organizational Insurance Programs

Your Sub-Committee on Insurance, whose responsibility is to direct the insurance programs of the Association, should like to first draw your attentiou to the health and accident insurance program sponsored through the North American Accident Insurance Company. This program is not designed to meet the total needs of the members of the Association but has filled a definite place in many members' insurance programs. Iu 1951 there were 800 members carrying this coverage. During 1951, there were 97 claims filed and $30,809.00 paid out in claims aud to the knowledge of the Committee through the Executive Office, there were not any criticisms of the manner in which the program was operated.

Your Committee would also point out that at least one other company (Continental Casualty) offering health and accident coverages to the medical profession in Oklahoma presents its program as one for ouly members of the Oklahoma State Medical Association. While this may or may not be true, the fact remains that at no time has this company checked its applicants with the Executive Office and the program does not bear the endorsement of the Association. This statement by your Committee is not intended to imply that the contract being offered is not without merit, as, on the contrary, it is offered by a very reputable compauy aud there have been no adverse comments concerning its contract reported to the Executive Office.

The next report of your Committee is uot a pleasant one. This report deals with the cancellation by the London and Lancashire Indemnity Company of its malpractice master policy held with the Association.

As most of your know, the master policy was cancelled March 1, 1952, effective April 1, 1952. Although

the Master Policy was cancelled on this date, it does not cancel the individual certificates held by the members of the Association until their expiration date. In some instances, the London and Lancashire is renewing policies held by physicians but such renewals are the standard policies of the London and Lancashire which is not as broad in its coverage as the certificates issued under the master policy.

Since the cancellation of this policy, your Sub-Committee has been and still is, in negotiation with several other casualty companies writing this type of business. It was the hope of the Committee that a report of a new contract could be made to the House of Delegates but such is not the case. Your Committee is of the opinion that it should not rush into any new contract until an exhaustive survey is made to secure the most advantageous contract as far as coverage is concerned, irrespective of the premium rate.

The history of malpractice claims over the past few years has pointed up the need for the physician to have complete coverage, with the best legal and investigative talent available for his defense and that the premium should be secondary. It is to this end that your Committee is working. As soon as a program is consummated, it will be announced to the membership.

Many have asked why the London and Lancashire cancelled its master policy. To date no concrete reason has been given although every effort has been made to find out. It is the general belief that the increase in claims was the underlying cause although the Company did not see fit to justify this statement as its reason. The Committee frankly does not know the answer to this question.''

Wm. E. Strecker, M.D., Oklahoma City, moved: ''That the Report of the Committee be accepted and that the Sub-Committee be instructed to continue in their attempt to secure a master policy on malpractice.'' Doctor Hart seconded this motion and the motion carried.

The next item on the agenda was a report from the Sub-Committee on Finance and Budget. The report was made by C. R. Rountree, M.D., as follows:

REPORT OF SUB-COMMITTEE ON BUDGET AND OFFICE MANAGEMENT OF ORGANIZATIONAL COMMITTEE

This Committee was directed to study certain activities of the Oklahoma State Medical Association particularly in connection with the budget and financial setup of the organization. The objective is to analyze the budget so that the membership can more readily understand what becomes of the monies paid into the organization.

This study obviously will require considerable time to complete and the following report is to be considered solely as a preliminary statement.

The Committee met on Wednesday, May 14, 1952, and discussed some of the problems concerning the office, financial structure and budget. As a result of this meeting, the following recommendations are submitted for your consideration.

I. The Committee sees no occasion at this time for any increase in the amount of dues and recommends that the dues be the same as levied in 1951—$42.00 per year.

2. The Committee strongly recommends that there be a definite continuity in the term of office of the county secretaries, except in those counties where a full time secretary is employed. Annual replacement of the county medical socity secretary does not permit the liaison between the state office and the county office which is so important in the matter of understanding and interpreting the financial structure of the state association.

3. The Committee recommends that the Association liquidate the outstanding obligations now due and payable.

4. After these obligations have been paid, we recommend a sum of $5,100.00 be set aside each month for operating the Association for the remainder of this fiscal year on a cash basis.

5. We recommend consultation with some qualified person in the field of office management for the purpose of reorganization of the financial structure, modus operandi, and methods of operating the office.

6. And finally, the Committee recommends that adoption of the budget for 1953, be delayed until late in 1952, and this be made the order of business of a special meeting of the House of Delegates or that the House of Delegates at this session delegate this responsibility to the Council.''

Following a lengthy discussion with regard to the budget, the Speaker asked the House whether they wished to have an extra session of the House of Delegates some time later in the year or whether they wished to delegate the budget responsibility to the Council.

O. H. Miller, M.D., Ada, moved: ''That the authority to give final approval to the budget as submitted by this Committee be delegated to the Council.''

Doctor McHenry moved, as a substitute motion for the motion on the Floor: ''That the report of the sub-committee on Budget and Office Management be adopted in its entirety. Allen Gibbs, M.D., Oklahoma City, seconded. Doctor Miller withdrew his motion and accepted Doctor McHenry's substitute motion. The motion carried.

Doctor Miller then moved: ''That the Authority for final approval on the budget be invested in the Council for this year.'' Doctor Etter secouded. The motion did not carry. Doctor Shuller, M.D., McAlester, moved: ''That a special session of the House of Delegates be called some time in the fall, the date to be determined by the Council, at which time a thorough study relative to matters of the budget be made.'' J. R. Colvert, M.D., Oklahoma City, seconded the motion. The motion carried.

At this point Dick Graham, Executive Secretary, addressed the House and congratulated them on the action. Mr. Graham advised that the Association had grown to a point where it was important that its matters of finance and budget have more serious study and consideration.

The next order of business was a report from the Postgraduate Committee. Harry A. Daniels, M.D., Oklahoma City, Chairman of the Committee, made the following report:

REPORT OF THE COMMITTEE ON MEDICAL EDUCATION

The Education Committee, as established by the last House of Delegates and as authorized by the House of Delegates, during the past year entered into a cooperative postgraduate medical education project with the Postgraduate Office of the Medical School of the University of Oklahoma.

Since this program was a complete departure from the type of postgraduate courses which had previously been offered by the Association it was impossible to get

the program under way until March 13, 1952. The spring course was entitled ''Review of General Medicine'' and consisted of three sessions for each 16 Regional Centers, the last session being held on May 15. Each session consisted of two lectures covering the following subjects: ''Recent Advances in Pediatrics,'' Recent Advances in Surgery,'' ''Emergency Orthopedic Measures,'' Management of Obstetrical Problems,'' Medicine and Therapeutics,'' ''Diagnosis and Treatment of Common Skin Disorders.''

The speakers for these sessions were selected through the Committee and office of Postgraduate Education and donated their services with the Committee reimbursing them for their travel expenses.

The Committee is not completely satisfied with the results of this plan of operation since the attendance has not been as great as was expected.

No advance enrollments for the course were required and the total attendance was 286 which is on the basis of individual sessions rather than the entire course.

The Committee urges the House of Delegates to authorize continued activity in the field of postgraduate medical education but recognizes the fact that any continued program must be based upon the experience in this year's Spring program. The Committee is prepared to survey the problem in an effort to make such modifications as will increase the interest in any program to be offered in the future.''

Doctor Larrabee moved: ''That the Report be accepted.'' Doctor Burleson seconded. Motion carried.

The Speaker called for a report from the Committee on Military Service. F. Redding Hood, M.D., Oklahoma City, made the following report:

REPORT OF THE COMMITTEE ON MILITARY SERVICE

The function of your Committee on Military Service is to act in an advisory capacity to the Oklahoma Volunteer Advisory Committee for psysicians, dentists, veterinarians, and allied specialists; an advisory committee to Selective Service concerning the withdrawal from civilian practice of physicians for military duty.

The Committee was created after the passage of Public Law 779, commonly called the Doctor Draft Law, and is composed of a representative from each of the fourteen Councilor Districts.

Since its inception the Committee has held eleven meetings and will hold another tomorrow morning to consider the requests of the military forces for Medical Corps personnel to begin their active duty this coming July.

The Committee would like to take this opportunity to express its appreciation for the excellent cooperation which the County Society Advisory Committees have given. Without their able assistance its task would be monumental.

Since the activation of the 45th Division in September of 1950, eighty-seven Oklahoma physicians have been called to active duty. This does not include those who may be called in July.

''Many of you will recall that the Doctor Draft Law created four (4) priorities: Priority I, being those physicians educated at Government expense or deferred for the purpose of an education leading to a degree in medicine and without military service. Of physicians in Oklahoma falling into this category, there are only sixteen who have not applied for a commission. From the criteria now available to the Committee it is anticipated that this category will be exhausted by late 1952. Priority 2, represents those physicians having the same deferment or educational expense backgrounds as those of Priority 1, but who have served in the Medical Corps more than ninety days but less than 21 months.

If the criteria governing Priority 1, is correct, it is reasonable to assume that certain of the Priority 2 group, will be called to Military Service during the early part of 1953. Priority 3, represents those physicians under 50 years of age who paid for their own education but have no military service. An anticipated call on this group is not foreseeable. There is an exception to this statement for the physician now graduating from Medical School who is still of Selective Service draft age. This physician finds himself in dual jeopardy, as he may be called as a regular Selective Service registrant irrespective of his registration under the Doctor Draft Law. This latter physician should consider immediately applying for a commission or be willing to gamble that he can secure a commission prior to induction, and thus qualify for his $100.00 per month incentive pay. Prior ity 4, physicians are those who have in excess of 21 months Active Duty in World War II, or subsequently thereto.

Your Committee would point out that its greatest responsibility is to secure Oklahoma's share of physicians for the Military Service without unduly disrupting essential civilian care. The number of physicians per 1,000 population does not always reflect a true picture of a given community's medical responsibilities.''

''County Societies Advisory Committees will continue to function in an advisory capacity, but they must bear in mind at all times that the function of all Committees considering this problem *is not* in the realm of protecting private practices, but solely in assuring communities of essential medical care.

Your Committee has been asked, upon occasion, whether or not it has any recommendations to make concerning any changes in the law. While your Committee feels that the operation of the law has revealed certain defects, these have already been made known to Selective Service and are now up for consideration when the law must be reenacted. Your Committee, on the other hand, is firmly of the opinion that Army regulation concerning physical standards to be met by applicants for commissions should be given closer study, and has so recommended to both Selective Service and the military forces. It is your Committee's opinion that any physician who can conduct an active practice is physically able to serve in the Military forces in some capacity.

Your Committee will continue to function to the best of its ability, and in the best interest of the health of the public, and invites your comments and criticisms.''

At the conclusion of the report L. C. Kuyrkendall, M.D., McAlester, moved: ''That the report be accepted.'' Motion seconded by Doctor Burleson and carried.

The next order of business was a report from the Grievance Committee. In the absence of the chairman, Paul Champlin, M.D., Enid, Doctor L. C. McHenry read the following report:

REPORT OF THE GRIEVANCE COMMITTEE

The operations of the Grievance Committee during the year 1951, and 1952 have been most encouraging. The Committee began the year with a carry over of four pending cases, all of which have been closed satisfactorily. A total of twenty cases were filed during the year, sixteen of which have been closed leaving only four pending before the Committee at this time.

The encouraging aspects of this operation have been:

(1) The relatively small number of cases filed during the year.

(2) The excellent cooperation from the members of the Association which has been enjoyed by the Committee in its efforts to bring these cases to conclusion.

For the information of the House of Delegates, the twenty cases as filed during the past year are classified as follows:

Cases concerning the fee only.....7

Cases concerning service only 8

Cases concerning both fee and service 5

At this time the Committee would like to call to the attention of the House of Delegates a situation in which a physician revealed facts from a patient's hospital record to an attorney opposing that patient in a completely unrelated law suit. To the Committee this is an example of a violation of the code of ethics which is of sufficient importance to be called to the attention of the entire membership. Many requests of a like nature are made by attorneys, insurance companies, and other interested parties, and the Committee feels that such requests should always be most carefully considered in order that the physician may avoid any possibility of destroying the confidential physician and patient relationship as established by the laws of the State and the principles of Medical Ethics.

The 1951 Session of the House of Delegates authorized the Committee to take advantage of the various meaus of publicity available to it, in order that the profession and the public both could be advised of the activities of the Committee. In regard to that authorization the Committee does not feel that its efforts have beeu as successful as they might have been. While the matter of providing publicity for the lay public is rather a difficult one, the Committee anticipates that pages of the Journal and the News Letter of the Association will be much more fully utilized during the coming year in bringiug to the attention of the membership of the Association reports of the activities of the Committee and suggestions and recommendations designed to eliminate the causes of public dissatisfaction with medical fees and services.''

At its conclusion, Doctor McHenry moved: ''That the report of the Grievance Committee be accepted.'' Doctor Sugg seconded and the motion carried.

The Speaker announced that the next item for consideration was Amalgamations. He advised that Adair Cherokee Counties had petitioned for amalgamation. Alfred R. Sugg, M.D., moved: ''That the amalgamation of these two counties be approved.'' Doctor Larrabee seconded. The motion carried.

The Speaker announced the petition for amalgamation from Cleveland-McClain Counties. Carl T. Steen, M.D., Pauls Valley, moved: ''That the amalgamation of these two counties be approved.'' Doctor Burleson seconded and the motion carried.

The next item of business was an invitation to representatives of the Student American Medical Association to attend the House of Delegates Meetings.

The Speaker asked the House if they wished to adopt the practice of this invitation permanently. Doctor Johnson so moved; Doctor Burleson seconded; the motion carried.

The Speaker announced that the Council had requested approval of the House of Delegates of the Settlement of the Beckham County Law Suit. Ralph Smith, M.D., Oklahoma City, moved: ''That the action of the Council be approved and that the Beckham County Medical Society be complimented on the manner in which the suit was settled.'' Doctor Burleson seconded the motion. The motion carried.

The next item on the agenda was the matter of Life, Honorary and Associate memberships. The Speaker read the list as recommended by the Council, as follows:

Life Membership

W. T. Andreskowski, M.D. Elk City
Udonna C. Boon, M.D. Chickasha
Leo F. Cailey, M.D. Oklahoma City
Wm. H. Cook, M.D. Chickasha
Thomas B. Coulter, M.D. Tulsa
George M. Davis, Sr., M.D. Bixby
John L. Day, M.D. Woodward
D. S. Downey, M.D. Chickasha
Thomas H. Flesher, M.D. Edmond
H. R. Haas, M.D. Sapulpa
L. A. Hahn, M.D. Guthrie
Richard R. Johnson, M.D. Sand Springs
William LeBlanc, M.D. Ochelata
D. W. LeMaster, M.D. Wayne
S. B. Leslie, M.D. Okmulgee
J. C. Matheney, M.D. Okmulgee
W. C. Mitchener, M.D. Okmulgee
Silas Murray, M.D. Tulsa
Daniel Perry, M.D. Tulsa
Robert E. Lee Rhodes, M.D. Tulsa
Winnie M. Sanger, M.D. Oklahoma City
Joseph G. Smith, M.D. Bartlesville
L. M. Westfall, M.D. Oklahoma City
C. O. Williams, M.D. McAlester

Life Membership (Temporary Provisions)

H. D. Boswell, M.D. Henryetta
Elizabeth Chamberlain, M.D. Bartlesville
J. B. Clark, M.D. Coalgate
J. E. Cochran, M.D. Byars
Robert D. Cody, M.D. Centrahoma
Emory S. Crow, M.D. Olustee
Henry A. Ellis, M.D. Kiowa
Alfred H. Hathaway, M.D. Mountain View
Finis W. Henderson, M.D. Tulsa
Walter Johnson, M.D. Ardmore
J. L. LeHew, M.D. (Sr.) Pawnee
Silas H. Mohrman, M.D. Tulsa
L. C. Presson, M.D. Tulsa
M. B. Scott, M.D. (Deceased) Delaware
Barton H. Watkins, M.D. Hobart
Llewellyn G. Wolf, M.D. Okarche

Honorary Membership

Finis W. Ewing, M.D. Muskogee
George A. LaMotte, M.D. Oklahoma City
James F. McMurry, M.D. Sentinel
Horace Reed, M.D. Oklahoma City
Henry K. Speed, M.D. Sayre
L. S. Willour, M.D. McAlester

Associate Membership

Mark R. Everett, Dean, University of Oklahoma School of Medicine.

Harold A. Schoemaker, University of Oklahoma School of Medicine.

Arthur A. Hellbaum, University of Oklahoma School of Medicine.

Doctor Sugg moved: ''That the list be approved and the members elected as read.'' Doctor McHenry seconded. Motion carried.

The Speaker then read the recommendation of the Council that the firm of Keaton-Wells-Johnston and Lytle be engaged on a retainer basis. Doctor McHenry

moved: "That the recommendation of the Council in this regard be approved by the House." Doctor Hiuson seconded. Motion carried.

The Chair then presented a proposal from the archivist of the University of Oklahoma for the collection of records pertaining to the History of Medicine in Oklahoma. L. J. Moorman, M.D., Oklahoma City, addressed the House and explained the importance of this work and asked the Association for an appropriation of $1500 to carry on the work. L. C. Kuyrkendall, M.D., McAlester, moved: "That the appropriation be grauted. O. G. Bacon, M.D., Frederick, seconded. The motion carried.

The Chair then called for a discussion as to whether or not it would be advisable to hold an annual meeting for officers of the county and district societies for their information aud indoctrination, etc., in connectiou with the administration of their offices. J. J. Swan, M.D., Chickasha, moved: "That we adopt the recommendation that an annual meeting be held, to which all officers of county and district societies shall be invited. Doctor Deputy scheduled. Motion carried.

The next item on the agenda was the presentation of amendments to the Constitution and Bylaws. A discussion followed as to whether they wished to introduce these ameudments by title only. Doctor Larrabee moved: "That the proposed amendments be presented at this time by title only and referred to the Constitution and Bylaws Committee for consideration in detail at the evening session." Motion seconded and carried.

The speaker called for amendments to be presented from the floor. None were forthcoming.

The Chair announced that the next order of business was an invitation for the next annual meeting. John Matt, M.D., Tulsa, extended an invitation to the Oklahoma State Medical Association to conduct its annual meeting in 1953, in Tulsa, Oklahoma. Doctor McHenry moved: "That the invitation be accepted." Allen Gibbs, M.D., seconded. Motion carried.

The Speaker called for the presentation of auy unfinished business from the last session of the House of Delegates. None was held over.

Next ou the Agenda was the matter of Resolutions. A discussion was held as to whether the Resolutions would be introduced by title at this time, referred to the Resolutions Committee for editing, and presented at the final session of the House in the closing session. Doctor Larrabee moved: "That the Resolutions be introduced by title only at this time and passed ou at the next session. Doctor McHenry seconded. Motion carried.

The Speaker asked for the Necrology Report and recognized the Vice-Speaker, Keiller Haynie, M.D., who read the list of members of the Association who had become deceased in 1951. The Chair asked for a stauding moment of tribute to these departed members as Dostor Haynie read the following report:

NECROLOGY REPORT

Since the last necrology report in May, 1951, the Almighty, in His Infinite Wisdom has called from our midst 35 of our beloved friends and co-workers. While we bow in sorrow to the will of the Omniscience, we are appreciative of these wonderful men—physicians, scientists, teachers and friends, and their far-reaching influences which will continue to inspire us to carry on our duties to humanity.

THEREFORE, BE IT RESOLVED that the House of Delegates of the Oklahoma State Medical Association resognize the demise of those former 35 fellow members and instruct the Secretary to inscribe with honor and regret the following names upon the records of the Association:

Victor K. Allen, Tulsa	November 11, 1951
F. M. Bailey, Oklahoma City	December 30, 1951
Robert Earl Beddoe, Shawnee	January 19, 1952
C. P. Bell, Welch	April 28, 1951
W. C. Bryant, Muskogee	March 9, 1951
T. C. Carloss, Morris	September 9, 1951
Guy Clark, Sulphur	November 22, 1951
Edwin H. Coachman, Muskogee	May 24, 1951
George W. Colvert, Miami	September 1, 1951
H. G. Crawford, Bartlesville	October 14, 1951
Jacob Thomas Crocker, Haskell	September 28, 1951
J. W. Craig, Miami	March 14, 1952
Thomas W. Dowdy, Oklahoma City	October 10, 1952
K. M. Dwight, Muskogee	December 10, 1952
H. A. Higgins, Ardmore	June 4, 1951
R. M. C. Hill, McLoud	November 22, 1951
R. W. Holbrook, Perkins	November 17, 1951
J. L. Holcomb, Vian	October 9, 1951
George M. Holcombe, Okeene	September 24, 1951
William Eugeue Hubbard, Tipton	January 9, 1952
A. G. Hughey, Dewar	February 8, 1951
J. H. Humphrey, Mooreland	October 14, 1951
W. M. Jones, Tulsa	May 21, 1952
W. Z. McClain, Marlow	January 16, 1952
W. C. McCurdy, Sr., Purcell	July 17, 1951
S. H. McEvoy, Enid	September 13, 1951
A. M. Mixon, Spiro	November 28, 1951
G. C. Moore, Ponca City	November 18, 1951
J. H. Plunkett, Wagoner	February 4, 1952
W. B. Putnam, Carnegie	January 17, 1952
S. W. Raines, Calera	October 1, 1951
Isaac W. Rogers, Muskogee	November 12, 1951
F. E. Rushing, Tulsa	June 3, 1951
M. B. Scott, Delaware	January 6, 1952
Gregory A. Wall, Tulsa	February 17, 1952

Respectfully submitted,
COMMITTEE ON NECROLOGY
P. P. Nesbitt, M.D., Tulsa, Oklahoma
George H. Neimann, M.D., Ponca City

Doctor Haynie moved that the Report be accepted. Doctor Larrabee seconded. Motion carried.

The Speaker announced that the Election of Officers was scheduled for 8:00 P. M.

The Speaker then declared the meeting adjourned at 5:00 P. M., to reconvene at 7:00 P. M. in the Mirror Room of the Municipal Auditorium.

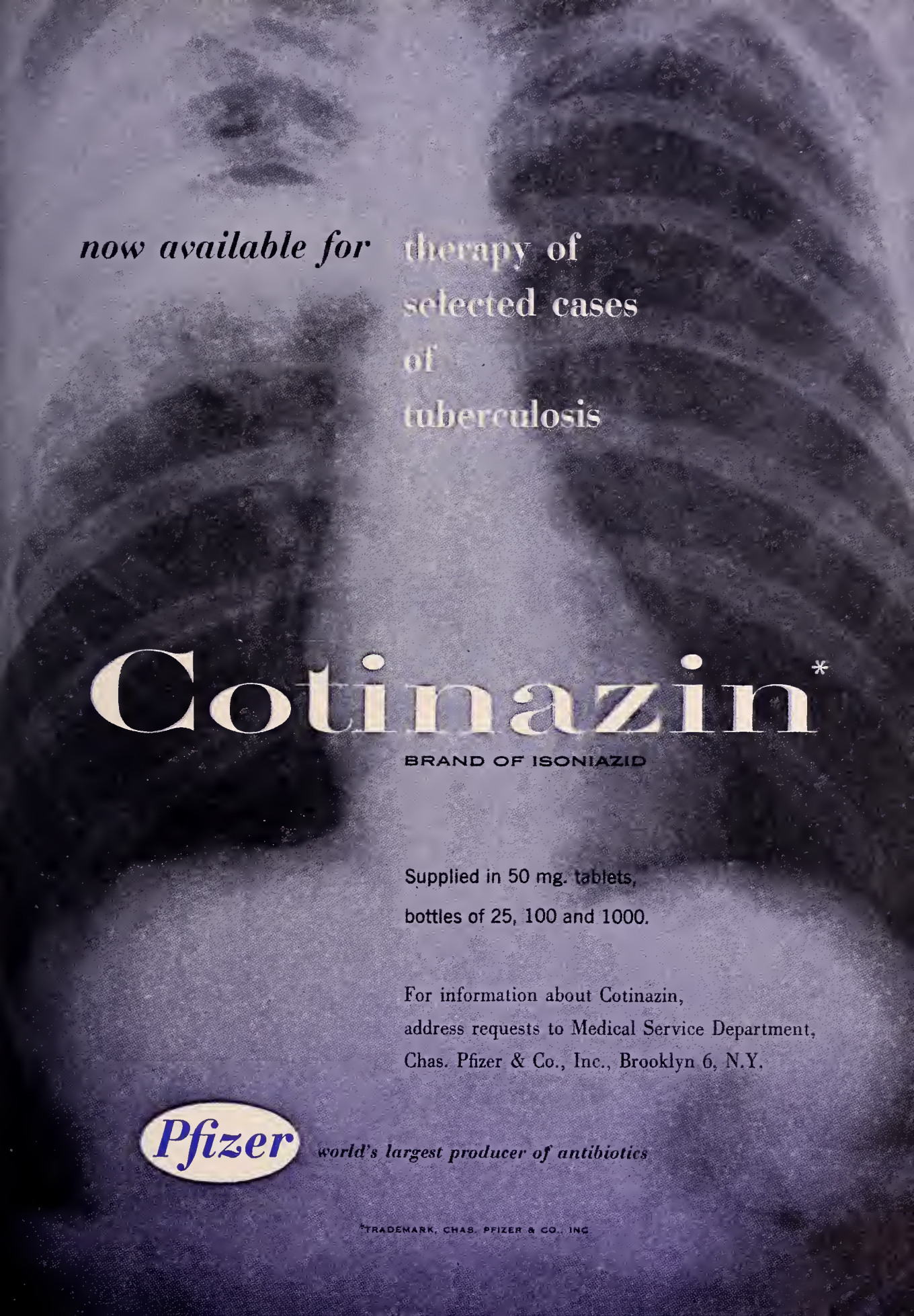
Minutes of the Second Session will be continued in the September issue of the Journal.

TEXAN IS SPEAKER

When the Okmulgee-Okfuskee County Medical Society met recently in Weleetka, Charles Ashworth, M.D., chief pathologist at Terrell's Laboratories in Fort Worth, Texas, was guest speaker. He spoke on "Early Diagnosis of Cancer." A. R. Sugg, M.D., Ada, President of the Oklahoma State Medical Association, also attended the meeting.

WOODS-ALFALFA SOCIETY MEETS IN ALVA

Henry Freede, M.D., Oklahoma City, was guest speaker at a meeting of the Woods-Alfalfa County Medical Society held in Alva. He presented a discussion on orthopedic problems of the lower back and feet.


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CURRENT ACTIVITIES AT THE OKLAHOMA MEDICAL RESEARCH FOUNDATION

EDWARD C. REIFENSTEIN, JR., M.D.
DIRECTOR



This is the ninth in a series of monthly articles concerning the activities of the Oklahoma Medical Research Foundation. This month we shall discuss the program that is being developed in the Organic Chemistry Section under Dr. Max N. Huffman, the studies that are being conducted by Dr. Allan J. Stanley and his associates, and the investigations that are being carried out by Dr. M. R. Shetlar and the research team of the Veterans Administration Hospital. All of these projects are under way at the present time in the Oklahoma Medical Research Institute and Hospital.

In 1949 a program of research in rheumatoid arthritis was undertaken by Dr. Max N. Huffman in collaboration with Dr. H. C. Coggeshall, of Dallas, Texas, at the time when Doctor Huffman was at Southwestern Medical School in Dallas. Doctor Huffman prepared several steroidal compounds and Doctor Coggeshall subjected them to preliminary clinical screening. In this project, the most important point chemically was the "blocking" of functional position C-3 of the steroid molecule with a methyl ether. Of the several "blocked" steroidal compounds that were prepared at that time, three were considered of sufficient importance to explore further. These three were pregnenolone-3-methyl ether, androstenediol-3-methyl ether and androstenolone-3-methyl ether. At this point, Doctor Huffman transferred his research activities to the Oklahoma Medical Research Institute. He has continued his program, and the clinical testing of these three substances has been carried on by Dr. W. K. Ishmael and his associates, of Oklahoma City. Doctor Ishmael has had considerable experience in the use of steroids in rheumatoid arthritis, and published in the Journal of the Oklahoma State Medical Association the initial report on the value of testosterone therapy in this condition.

In the course of the investigation of one "blocked" androgen (androstenediol-3-methyl ether) in rheumatoid arthritis, it was observed that this substance had a pronounced desoxycorticosterone-like effect. Therefore, studies have been undertaken to determine the clinical value of this substance in patients who have adrenal cortical insufficiency. Pregnenolone methyl ether (PME) has been found to produce interesting results in certain patients with bronchial asthma. The investigation of this compound has been done by Drs. Allan J. Stanley, George Bozalis, Vernon D. Cushing, and Richard Huff of Oklahoma City. The clinical findings are soon to be published in detail. Some of the animal and laboratory determinations dealing with this compound have been undertaken by Dr. Allan J. Stanley in the Oklahoma Medical Research Institute and will be mentioned subsequently.

At the present time, Doctor Huffman is engaged in the preparation of steroid compounds that possibly have inhibitory action on the anterior pituitary gland. The anterior pituitary is the source of a number of tropic substances, including growth hormone, the gonadotropins, adrenocorticotropic hormone, lactogenic hormone, thyrotropic hormone, and so forth. The development of agents which could block the release or formation by the anterior pituitary gland of these tropic substances would have considerable theoretical and practical interest.

The investigations undertaken by Dr. Allan J. Stanley in one of the laboratories of the Oklahoma Medical Research Institute have been supported in part by funds from the Oklahoma Medical Research Foundation and in part by funds from the Balyeat Clinic, Oklahoma City. Doctor Stanley's clinical testing has been done by Dr. George Bozalis, Dr. Vernon D. Cushing, and Dr. Richard D. Huff. The studies have been concerned with the effect of adrenocorticotropic hormone (ACTH) in patients with hay fever and asthma on the excretion in the urine of 11-oxycorticosteroid substances. More than 200 determinations have been made. During the year Doctor Stanley and his associates have presented two papers before national meetings concerning these studies, and one of these papers has since been published. In addition to these studies on urinary metabolites, Doctor Stanley also has been studying enzymes, such as uropepsinogen, and the influence of the adrenocorticotropic hormone on them. Doctor Stanley also has been engaged in studying in patients compound AR-3 which has been prepared by Dr. Max Huffman (see above). Some animal studies are being carried out in an effort to establish the mechanism of the action of compound AR-3.

The research program of the Will Rogers Veterans Administration Hospital in Oklahoma City has an interesting history. The research laboratory was organized in July, 1950. Previous work dating back to 1940 by professional personnel of this station and of the University of Oklahoma School of Medicine formed the background of this organization. Locally, the laboratory functions under the direction of a Research Committee consisting of the Chiefs of the major services of the Hospital, the Hospital Manager, the Chief of the Research Laboratory, and two representatives from the University of Oklahoma School of Medicine. Nationally, the Veterans Administration Research Program is organized under the Assistaut Chief Medical Director for Research and Education. The research program has as a principal objective the stimulation of an investigative frame of mind in the professoinal staff of the hospital; that is, in the physicians, the nurses, the dentists, and the other scientific personnel. To further this objective, proposals for future research may be made by any member of the staff of the hospital for consideration by the local Research Committee.

It was originally planued to construct laboratories in the Veterans Administration Hospital at Will Rogers Field. However, as the plans developed for the construction of a new Veterans Hospital in conjunction with the Medical Center in Oklahoma City, it was decided that no new construction would be made at the Will Rogers Station. Consequently, a request for laboratory space and facilities was made to the Oklahoma Medical Research foundation. The Foundation gladly made space available to the Research Unit of the Veterans Administration Hospital, and the laboratories were moved into the Research Institute in November, 1950.

The personnel of the Will Rogers Veterans Administration Hospital Research Team consists of Dr. M. R. Shetlar, Director, Jane Ann Bullock, Biochemist, Val. V. Lovisa, Biochemist, and Ruby Stephenson, Secretary. This group has undertaken as a sustaining project the study of the serum and tissue mucopolysaccharides. Currently two investigations are under way. One involves a study of the changes in serum polysaccharides in rheumatic fever patients who have been treated with cortisoue, salicylates, and bed rest. The other involves the

changes in serum polysaccharides and other blood constituents in arthritis patients treated with various steroid hormones. This work has resulted in one published paper, in presentations at two scientific meetings, and in the development of an animated movie depicting the findings. In cooperation with the University of Oklahoma School of Medicine, a study is under way by Dr. Mark R. Everett and Doctor Shetlar on tissue polysaccharide content of normal and neoplastic tissues, with the assistance of Virginia Richmond, Biochemist. This study is fiuanced in part by a grant from the National Cancer Institute.

In addition, research is being conducted by Doctor Shetlar on the origin, fate and role of serum polysaccharides, with the assistance of Clara Shetlar and William Knoblock. This work is supported jointly by the Oklahoma Medical Research Foundation and the University of Oklahoma School of Medicine. An investigation of the effect of fever on the serum polysaccharide levels is now nearly finished. A study on the effect of different types of inflammation on the serum polysaccharide fraction is also nearing completion. An investigation has been started on the serum polysaccharide levels in adrenalectomized animals. During the past year one paper has been published and three have been delivered before national scientific meetings.. These papers deal with the effect of cancer on serum polysaccharides and with the metabolism of serum polysaccharides.

This article brings out the diversity of activities at the Oklahoma Medical Research Institute and Hospital. In addition to research in the fields of cancer, cardiovascular disease, endocrinology and bone disorders, there are studies in rheumatoid arthritis, in asthma and hay fever, on the synthesis of new compounds, on enzyme activity, and on the mucopolysaccharide composition of blood and tissues in various disorders. It is anticipated that the scientific program will become even more complex when all phases of the Research Institute and Hospital are in full operatiou.

CLASSIFIED ADS

FOR SALE: Complete new x-ray and equipment alone or with complete office equipment. N. E. Ruhl, M.D., 1438 N. E. 23rd, Oklahoma City, Okla.

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MEDICAL STUDENTS GUESTS OF ELI LILLY



Medical students of the University of Oklahoma were guests of Eli Lilly and Company on June 8, 9, 10, and 11, 1952, at the company's laboratories in Indianapolis and Greenfield. During their visit in Indianapolis, they inspected the company's main research laboratories, various production facilities, and a replica of the original plant. At Greenfield, they witnessed demonstrations of biological production. Breakfasts, luncheons, dinners, tours and other entertainment were provided by the Eli Lilly Company.

HAVE YOU HEARD?

John H. Lamb, M.D., Robert J. Morgan, M.D. and *Paul O. Shackelford, M.D.*, all of Oklahoma City, were authors of a paper on 'Unusual Sunlight Eruptions'' presented at the A.M.A. held in Chicago in June.

William H. Garnier, M.D., Stillwater, has just completed a postgraduate course in ophthalmology at Washington University and has returned to Stillwater.

H. D. Moor, M.D., has opened his office at 1409 North Portland, Oklahoma City.

L. D. Bruton, M.D., Muskogee, was recently featured in his home town newspaper when he celebrated his 82nd birthday.

Charles E. Green, M.D., Lawton, gave the commencement address at the Lawton Junior Highschool.

G. A. Comp, M.D. and Mrs. Comp, Manitou, were recently honored as the most useful citizens of their city.

Nathan Boggs, M.D., formerly of Oklahoma City, has retired and moved to Goodwell where he is making his home with his daughter.

W. T. Hawn, M.D., was receutly honored when the citizens of his community staged an appreciation day'' for him.

C. M. Martin, M.D., Elgin, was recently honored wheu 700 friends gathered to celebrate his birthday.

James J. Gable, M.D., has been released from service and returned to Oklahoma City after two years in the army medical corps. Doctor Gable was chief of medical service at Fort Riley Station Hospital, Fort Riley, Kans., at the time of his release. He was formerly battalion surgeon with the 45th Division.

THE JOURNAL

of the

OKLAHOMA STATE MEDICAL ASSOCIATION

EDITORIALS

PHENOMENAL PROGRESS ON THE PLAINS

In this issue of the *Journal*, there is a detailed description of the Research Foundation's special hospital designed to serve the meticulous investigators of the Institute, who spend their days searching out the secrets of life and the influence of disease and the response to environment, whether natural or artificial, spontaneous or induced.

Here where a century ago, countless buffalo roamed at will and the redskins lived by the kill, we walk the wards in scientific safari supplementing the primitive five senses with instruments of precision with which to pursue our game.

While all this striving in the pure sciences interests the general practitioner, he is busily occupied with the obvious manifestations of disease and the natural response of the psyche and the soma in the world of comprehensible reality. Working on the basis of what is known with the tools provided by scientific discoveries, his service to humanity is incalculable. While relieving pain, curing disease and satisfying the soul, he can well afford to let the laboratory addicts worry over the biological response to selected stimuli and the search for previously undiscovered physiological phenomena while the tracer isotopes chase the tagged atoms and the cellular and corpuscular elements wage war against microscopic enemies. We clasp hands with the workers in pure science and continue to "pinch hit" at the bedside while awaiting new instruments of warfare now being forged in the laboratory with the cooperation of the clinician in the Research Hospital. There is no reason to be ashamed of empiricism. Often it prepares the way for scientific precision.

The clinician should never forget the challenge of chance. It constantly clamors for recognition within and without scientific laboratories. History indicates that it comes to the practicing physician as well as to the scientist in seclusion.

A striking materialistic example is that of the laborer's crowbar accidentally dropped between heavy steam rollers of the Pittsburg steel mills recovered as a changed bit of metal the recognition of which by Andrew Carnegie led to all the cold rolled steel rails that carried the iron horse across the continent and gave rise to a network of tracks for transportation throughout the civilized world. The laborer was rewarded and the world reduced in its dimensions.

We applaud the scientists and when they succeed in replacing our remaining empiricism with demonstrable truth, we hope they may take up the trail of the soul and bridge the gaping chasm between the mind and the body.

MEDICINE IN FRANCE

In the June number of *Medical Times*, Dr. Arthur C. Jacobson[1] offers the following pertinent comment on socialized medicine as a factor in France's decline.

"In France the worker, when ill, receives complete medical care free; for a maternity case in the family he gets $667.00 (*sic*). As a result the birth rate has gone up; there are now 300,000 more births annually than deaths.

"But this welfare system has been so fantastically costly that the nation's economy is a nightmare.

"One government after another falls; no finance minister can cope with the weird problem; no political party dares to advocate a cut in the benefits.

"What point is there to raising the birth rate if thereby a glorious power is reduced to a third-rate status among the nations of the world?

"This is the France that is expected to constitute the West's chief bastion against aggression."

1. Medical Times, Vol. 80, No. 6 (June) 1952, page 381.

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TUBERCULOSIS A CONTINUING PROBLEM; AN UNCERTAIN FUTURE

Today no physician is expected to understand the therapy of tuberculosis but all should know that while the present confusion, occasioned by the new drugs, exists, there can be no excuse for giving up the time tried methods of management.

In the July 26 A.M.A. Journal, there is a timely editorial titled "Caution in the Chemotherapy of Tuberculosis". Space will not permit a full discussion of this editorial which is available to most of our readers. But to emphasize the problem we quote briefly:

"Three recently developed antituberculosis drugs, isoniazid (isonicotinic acid hydrazine), iproniazid (1-isonicotinyl—2-isopropyl hydrazine), and pyrazinamide, are now undergoing extensive clinical testing. These drugs have shown definite but limited therapeutic activity against human tuberculosis, but there is much concern among workers in this field that their potential value may rapidly be neutralized if they are used improperly or indiscriminately by those not trained in the treatment of tuberculosis. The recent increase in the availability of isoniazid has brought this problem into acute focus.

"One of the major threats to the effective use of the newer forms of tuberculosis chemotherapy lies in the possibility that physicians will attempt to use these drugs as the sole form of therapy. As the American Trudeau Society, the American College of Chest Physicians, and other organizations dealing with tuberculosis have repeatedly emphasized, these compounds are not in themselves cures in spite of the earlier optimistic publicity given to some of them. They, like other forms of chemo-therapy, must be used as adjuncts to the time-tested measures of bed rest, collapse therapy, and surgical procedures. Moreover, as adjuncts they have not yet proved clinically superior to, or even so effective as, the combination of streptomycin and p-aminosalicylic acid in the treatment of tuberculosis.

"Another threat to the continued effectiveness of these drugs arises from the fact, now well established, that the tubercle bacillus is capable of developing resistance to them rapidly both in vitro and in vivo."

The physician who has the courage to employ these drugs should have the wisdom to see that they only supplement the well known management preferably pursued in the sanatorium.

To further emphasize the confusion, the 400 page fine print Transactions of the 11th Conference on the Chemotherapy of Tuberculosis, Veterans Administration: Army: Navy is now available. The earnest discussion of honest research on the road to truth resulted in six miles of tape recording without finding the answer. Fortunately, the work goes on. V. A.'s John Barnwell and his collaborators in hospitals, laboratories and clinics throughout the United States deserve the everlasting gratitude of all people, patients and physicians. With the hope that this therapeutic confusion represents the darkness that precedes the dawn, we carry on.

"MANNERS MAKETH THE MAN"

In this distraught world of audio-visual communications and mechanistic high tension, nothing is more helpful than a retrospective glance at the record of man's response to the dynamic forces of destiny.

In his book under the above title, R. Brim Johnson says: "With the progress of civilization, manners deteriorate and decay . . . ". This departure from the social rituals of days gone with changing codes of action in all fields of human endeavor has not been good for medicine. The ideal patient-physician relationship has deteriorated and we are now trying to patch the breach by artificial public relations.

While we are more civilized, we are less civil. While more scientific, we are less sensible and while we are more sophisticated, we are not sufficiently psychosomatic to hold both body and soul in line. It is well known that in the philosophy of medicine manners make the man, yet we must confess that in spite of scientific progress we are woefully short on professional manners.

VOTE
IN
NOVEMBER

Scientific Articles

THE BILLROTH I GASTRECTOMY*

LAURENCE S. FALLIS, M.D. AND JAMES BARRON, M.D.
DETROIT, MICHIGAN

Subtotal gastrectomy is the operation of choice when surgical intervention is indicated in the treatment of gastroduodenal ulceration. Numerous authentic reports in current surgical literature indicate that a satisfactory result is obtained in upwards of 85 per cent of patients who submit to this operation. While many of the poor results are due either to improper selection of patients for operation or to the removal of too little gastric tissue, the chief cause of operative failure is the sequelae of jejunal or stomal ulceration. The incidence of jejunal ulceration varies from five per cent to 15 per cent, according to the criteria established for diagnosis of the condition. Observers who rely on x-ray evidence will find few cases, while those who arrive at a diagnosis of jejunal ulceration on the basis of clinical findings of ulceration such as the recurrence of typical ulcer pain and hemorrhage will record a considerable number of cases perhaps as high as 10 per cent. In this clinic we have come to regard the appearance of frank gastro-intestinal hemorrhage after gastrectomy as a clear indicatoin of the presence of jejunal ulceration.

Two avenues of approach to solution of the problem are apparent. One method is to supplement gastrectomy with vagus section, and the other is to utilize the duodenum instead of the jejunum when restoring gastrointestinal continuity. The former in our experience apparently is effective although insufficient time has elapsed to make a definite statement on this point. During the past five years 90.0 per cent of subtotal gastrectomies performed in this hospital have been supplemented by concomitant bilateral vagotomy. A careful follow-up appraisal of these patients has revealed a single instance of suspected stomal ulceration, while a comparable group without vagotomy showed 10.0 per cent incidence of jejunal ulceration. It is with the former, however, that this communication is concerned. Utilization of the duodenum in the re-establishment of gastrointestinal continuity after gastrectomy implies the employment of the Billroth I technic or one of its modifications. The modern Billroth I operation is successful because the dangerous three way angle of sorrows is eliminated by tubing the remaining gastric segment, as suggested by Schoemaker[1], Polya[2] and others. The resulting elongation and narrowing of the stomach facilitates end-to-end anastomosis to the duodenum since mobility is increased and lumenal inequality is reduced. This technic is not easily applicable to many cases of penetrating heavily scarred duodenal ulcers on account of the difficulties and dangers inherent in mobilizing sufficient of the end of the duodenum to effect direct anastomosis. The situation may be met by utilizing the modification introduced by Von Haberer[3] in 1922 and Finney[4] in 1923. Essentially this consists of closing the end of the duodenum and anastomosing the end of the stomach to the side of the mobilized descending duodenum, termino-lateral gastroduodenostomy.

ADVANCES

The following advantages of gastroduodenostomy may be cited:

1. Anatomic.—The normal anatomic relationship is restored.

2. Physiologic. — Gastric contents after operation are poured into the duodenum, an organ accustomed to receiving acid secretion and, theoretically at least, better adapted for this purpose than the jejunum.

3. Technical.—(a) The entire operation is performed in the supracolic compartment, a fact of definite value when dealing with substandard patients and when the procedure must be carried out under local anesthesia, since disturbance of the colon, mesocolon and small intestine is avoided. (b) The duodenal stump should be more secure, since back pressure on this area is impossible. (c) Postoperative gastric retention due to mechanical kinking at the stoma does not occur.

The following objections have been raised: 1. The operation technically is more difficult than gastrojejunostomy. 2. Insufficient stomach is resected. This objection is invalidated if the duodenum and stomach

*Presented before the Section on Surgery at the Annual Meeting of the Oklahoma State Medical Association, May 19, 1952.

are adequately mobilized and the decision to utilize the operation is not made until after the resection is accomplished. 3. Reflux of beneficial alkaline duodenal contents into the stomach is less than after gastrojejunostomy. Continuous postoperative gastric aspiration in comparable groups of patients has shown that there is no appreciable difference in the amount of duodenal contents removed. 4. Complete mobilization of the duodenum increases the tendency to duodenal ileus. This did not occur in any of our patients.

OPERATIVE TECHNIC

1. Mobilization of the duodenum:

The peritoneum and fascia propria lateral to the descending duodenum are sectioned, thereby mobilizing both the duodenum and the head of the pancreas. This exceedingly useful maneuver not only permits adequate inspection and palpation of these organs to determine the feasibility of resection in penetrating duodenal ulcers complicated by edema and induration, but also facilitates closure of the duodenal stump.

2. Ligation of left gastro-epiploic artery:

The water shed between the right and left gastro-epiploic arteries is defined and the terminal nodules of the left artery are clamped and tied. The slender communicating branch connecting these two vessels which often is the only visible connecting link, since the greater part of the anastomosis takes place in the gastric wall, is now doubly ligated and cut.

3. Ligation Right Gastro-Epiploic Artery:

This artery is picked up and ligated in the gastrocolic omentum about two and one-half inches proximal to the pylorus so as not to denude entirely the blood supply of the great omentum. The gastrocolic omentum between the two ligated principal arteries is cut and tied as are the primary radicles of the right gastro-epiploic artery supplying the pylorus and prepyloric region of the stomach. The middle colic artery must be identified and protected during this procedure.

4. Ligation of Right Gastric Artery:

The right gastric artery now is doubly clamped and ligated, thereby completing mobilization of the pyloric end of the stomach.

5. Sectioning the Duodenum:

Two Kocher clamps are placed, one proximal and one distal to the pylorus and the duodenum is sectioned between them. In difficult penetrating ulcer cases it is advisable not to use a clamp on the duodenal side since every bit of tissue may be needed for the closure which is carried out immediately since direct anastomosis is impossible or extremely difficult in situations of this nature.

6. Ligation of the Left Gastric Vessels:

The left gastric artery and vein identified by turning the stomach over to the left are isolated, clamped, cut and ligated at a point distal to the first gastric branch. The gastropancreatic omentum is sectioned with the vessels, thereby removing the main stomach support and producing maximum mobility of the organ.

7. Vagus Section:

Upward retraction of the left lobe of the liver and downward retraction of the mobilized stomach renders taut the triangular peritoneal and fibrous support running from the diaphragm to the oesophagus and upper part of the stomach, dividing this structure after clamping and tying branches of the inferior phrenic artery, exposes the oesophagus. Care must be taken not to ligate an aberrant branch of the left gastric artery, if unusually large. In some instances this may be the main supply of the left lobe of the liver. Continued downward traction in the stomach causes the vagi to stand out like whip cords and renders identification easy. Segments are removed from both vagi for microscopic verification.

8. Removal of Gastric Segment

The completely mobilized stomach is now brought up into the wound, and two parallel two and three-fourths inch Kocher clamps are applied from the greater curvature side at right angles to the long axis of the stomach at a point proximal to the distal branch of the left gastro-epiploic artery. The stomach between the clamps is cut across to a point just beyond their tips, and a second pair of three and one-half inch Kocher clamps are applied at right angles to the first pair in such a fashion that their distal extremities grasp the lesser curvature just at its junction with the oesophagus. Resection is completed by cutting between the clamps. Inspection of the removed area reveals that the entire lesser curvature, fully two-thirds of the greater curvature and contiguous portion of the body of the stomach have been removed. This in effect achieves what is accomplished by the use of Schoemaker clamp. We believe that removal of all of the lesser curvature is of utmost importance. The upper clamp is now removed and this portion of the stomach is

closed by a double row of sutures. It will now be seen that a narrow elongated tube of stomach remains.

9. The Decision as to Type of Restoration of Continuity:

A trial approximation of the gastric tube to the duodenum is now made, and if it is obvious that anastomosis can be made without tension, a Billroth I type of restoration is proceeded with, otherwise a retrocolic gastrojejunostomy is carried out. Again we wish to emphasize that the decision regarding the type of anastomosis is not made until this stage of the operation is reached. Usually some additional mobilization of the duodenum and head of the pancreas must be done by further sectioning of the fascia propria. Rarely the hepatic flexure has to be mobilized downward by cutting its outer leaf of peritoneum, but frequently the right margin of the upper leaf of the mesocolon must be brushed downward to expose more of the descending duodenum.

10. The Anastomosis:

(1) *Billroth I*—Direct end to end union of the stomach and duodenum is carried out when there is no gross retraction or scarring of the duodenum since accurate closure can be made only when at least 1 cm. of the proximal duodenum can be freed. A two layer suture is employed, an inner of continuous catgut and an outer of interrupted fine silk. It is advisable to take small bites of tissue in both the gastric and duodenal wall, otherwise the lumen will be handled unnecessarily. Tubing the stomach as described in the foregoing reduces the lumen of the gastric remnant so little discrepancy is apparent. Though it is usually necessary to take wider bites of tissue on the gastric side to produce the desired result a purse-string suture of fine silk effectively closes the three way angle of sorrows.

Von Haberer-Finney—The posterior wall of the end of the stomach is sutured with interrupted fine silk to the anterior wall of the duodenum close to the mesenteric border of the latter. A suitable opening is now made in the duodenum and the anastomosis is completed by a circular interlocking suction of atraumatic catgut reinforced anteriorly with interrupted suture of fine silk. A precautionary purse-string draws together both gastric walls and the duodenum at the dangerous upper three way angle of sorrows. The anastomosis which readily admits two fingers is freely mobile and lies without tension.

COMMENT

The author's interest in this type of anastomosis was first aroused by its employment in the treatment of jejunal ulceration following gastro-jejunostomy and recurrent jejunal ulceration after adequate subtotal gastrectomy.[5] Later in performing gastrectomy under local anesthesia in patients recovering from massive hemorrhage and other sub-standard patients its advantages were again apparent, because the operative procedure can be carried out entirely in the supracolic compartment. On the basis of an encouraging beginning the scope of the operation has been extended gradually until approximately two-thirds of the gastrectomies are performed according to the method described in the foregoing. We have now used this technique on 150 patients during the past five years. There has been one death in the series from anastomotic failure but this occurred in a patient after a second gastrectomy for bleeding jejunal ulcer. Delayed emptying of the stomach has presented some problem in those cases supplemented by vagotomy but neither the dumping syndrome or proven recurrent ulceration has been observed. The follow-up in this group of patients has shown an entirely satisfactory result in 85.0 per cent, a figure that is not in variance with our results when intestinal continuity was restored by gastrojejunostomy. I wish to stress again the admonition that the operation should be utilized only in those patients on whom maximum mobility of the duodenum and stomach has been attained.

SUMMARY AND CONCLUSIONS

1. The Von Haberer-Finney-Schoemaker modification extends the scope of the Billroth I operation.
2. The operation is technically applicable only after the gastric remnant is tubed and the duodenum and head of the pancreas are completely mobilized.
3. Subtotal gastrectomy under local anesthesia is facilitated since the operation is performed entirely in the supracolic compartment.
4. A personal experience of the operation in 150 patients over a five year period has been entirely satisfactory both in regard to operative mortality and end result.
5. The addition of vagotomy will increase the incidence of delayed emptying of the stomach but in our experience the incidence of jejunal ulcer is greatly diminished.

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THE PROSTATE--A RESUME OF PRACTICAL PROBLEMS IN TREATMENT AND MANAGEMENT*

ALFRED R. SUGG, M.D.
ADA, OKLAHOMA

I have elected to tackle this subject from a strictly personal point of view. It will, therefore, be more in the nature of a testimonial rather than a scientific paper. I shall not present any graphs, charts, or statistics. I have found that I can profit more from an essayist who gives me the benefit of his own thinking rather than the one who tries to assemble all the information that has accumulated for 100 years on any subject. I have done enough general practice to enable me to appreciate, better than many urologists, the problems of the general practitioner and especially as they relate to the subject today.

The diseases and disabilities resulting from the pathological prostate have, of course, been with us always and physicians have had the perpetual problem of bringing such aid and comfort to these suffering brethren as possible. It is estimated that even in this post-gonorrheal age that almost half of the male population have infected prostate glands of some degree. Twenty per cent of all men over 60 have carcinoma of the prostate, and I suppose all the rest of us, if we live long enough will develop benign hypertrophy. If these figures are anywhere near the truth, it is self-evident that a working understanding of this portion of the prostatic problem, that is prostatitis, is a *must* for the family physician. This is as good a place as any to make clear my position on the specialist and the general practitioner problem.

A friend, who knew of this paper remarked, "If you are trying to make urologists of every one, won't your urologist friends in Kansas resent it?" My answer was that I think every M.D. should know as much urology as possible, for the simple reason that much of it can be done and done well by the alert general practitioner. Facts of geography and economics demand that it be done in your office. As to invading the specialist's field, he would be pleased to have every physician become more conscious of the problems peculiar to urology, as that would bring into focus many conditions now neglected or overlooked entirely early enough that something could be done about it. The more you know about it, the larger number of cases you will refer to the trained expert for care or at least for consultation. Of course, if there should be one among you (and God forbid) who thinks all one has to do is to buy a cystoscope and proceed to add urology to his many other jobs, then all of us, patients and doctors alike will suffer. If the physician has not integrity and intellectual honesty, there is no way to circumvent his capacity for mischief. In my state, and I am sure in yours, there is much room for more knowledge and practice in this field by the family physician and a crying need for the realization of the length of your cable tow and when that is reached, consult your urologist all with profit.

The punster was not far off when he said we spend the first 50 years of our lives trying to make money and the remainder of it trying to make water. It is hard, really to see how even a larger number of prostates are not infected, subjected as the gland is to attack by bacteria from outside and inside, including the blood born infections. When you add to the inevitable hazards, the wholly unnecessary assaults made on the defenseless organ by eager-beaver physicians you have a formidable problem. The gland could not have been placed in a more strategic spot to pick up these infections and for the purposes of obstructing the urethra, encircling as it does, this hollow tube and the only means of exit for the urine, why even the Almighty could not have improved on that arrangement.

Much study has been made as to the physiological functions of the prostate gland. The endocrinologists tried hard to make something of it, and it seemed for awhile they might succeed, but as of now all we know about its use is that it is some assistance in procreation, tho we don't know exactly how. It has been said every doctor to be a successful physician needs gray hair

*Presented at the Kansas Medical Society 1952 meeting.

and hemorrhoids—the gray hair to give him a look of distinction and the piles to give him an expression of concern. Now if you need a substitute for the hemorrhoids, the man with a Robert-Fulton bladder will do fairly well. The Robert-Fulton bladder is to the patient as the first steamboat was to the scoffers who assembled to see the initial run on that historic occasion. They scoffed "It will never start" and when to their surprise she moved out, they chimed in "She will never stop."

Education as often depends as much on what to forget as to what to remember. One of the most deadening influences that can possess a man, and especially a physician, is to acquire an idea and then to close the mind to all evidences that it is wrong. A physician with such an attitude is most likely the one with the ever ready dictum "in my experience." It is too often meaningless, for in reality he has succeeded in making the same error for 40 years. Tradition, and respect, and even reverence for the past and for the giants of medicine are praisworthy, and I should like to be known as one who pays tribute to those who have contributed so much, but even the snake sheds last year's skin. Some distinguished physician having expressed himself in a paper and having acquired a number of disciples who follow him blindly and indefinitely, influences the current practice far too much. That course is not always smart, for often the old master has already quit the procedure before you have learned it. In this respect, the prostate has accummulated more than its share of barnacles. Who among you has not been taught the exact art of prostatic massage, the number of strokes, the amount of pressure, the direction, and the optimum interval for the manoeuver?

You would not step on a sore toe and give it 14 strokes with your heel and that is about what an energetic massage amounts to. To be sure, you milk out some secretion, enough for microscopic study which is a very laudable purpose for the undertaking. But the prostate is a very complex gland with a tremendous number of branching ducts, so that if you apply presure enough to push pus out north, you automatically push some deeper in south. You couldn't get all the pus out of the prostate if you laid it on the kitchen table, ran a rolling pin over it a dozen or so times any more than you could get all the buttermilk out of a sponge by squeezing it. If you are a typical audience I can just hear you saying "But in my experience, Doctor, it at least makes them feel better and they come in regularly on their own accord for treament.." How true! Here, I would urge you to secure a good text on homosexuality. It bobs up in most unexpected places. I have quite a number of those rascals who swear by the efficacy of the massage and want more even though I had turned my finger around and massaged the coccyx and never touched the gland. The massage! That's the thing!

The two other time-honored measures that are equally fallacious is silver nitrate into the posterior uretha and sounds. Some men put strong silver into the prostatic urethra as prostatic medication. It immediately precipitates the protein, which together with the resultant edema completely closes the microscopic openings in the gland and most effectively seals in the infection. To expect medicine to thread its way through those 40 or so appertures and into the glands in any significant amounts, would be as improbable as to expect the next Congress to reduce taxes. The sound is never indicated in prostatic disease and should not even be passed through the prostate except as a diagnostic measure, and here the much neglected two-glass urine specimen will frequently give the information you need without the resulting trauma. I frequently still see men being treated for gonorrhea that will not clear up, even after antibiotics, who probably did not have gonorrhea in the first place, but had a discharge that has been miscalled gonorrhea forever. Many discharges produced by micrococcus catarrhalis and other mixed infections have been micalled gonorrhea and so treated. We still see people with marked phimosis and with strictures undergoing a long series of prostatic massage, with no results when the real cause of their trouble could be easily and simply eliminated. In general we teach that infection is primarily acute and if improperly eliminated becomes a chronic infection. This state of affairs is not true with reference to the prostate. It is my opinion that it is more often a chronic infection with acute exaccerbations than the other way around. That means, perhaps, that it is metastatic invasion of the prostate to begin with, and that most certainly can happen. I know that the idea of focal infections is out of style now, but the physician who has not been convinced that perinephritic abscesses follow a boil on the

neck simply has not been a close enough observer.

Likewise, if he has not noted that prostatitis is more prevalent in men with abscessed teeth, he needs to have his diagnostic acumen overhauled. That is, you can have an acute prostatitis out of a clear sky when there is no possibility of gonorrhea, no meddlesome sounds and no trauma of any kind. We must, therefore, look for the focus of infection when an unsuspected prostatitis is discovered. Once infected, the prostate itself becomes a source of trouble leading to constitutional disturbances especially iritis, myositis, neuritis, low back pain and one of the best evidences that the prostate is the source of infection is that an over-zealous massage will frequently cause these conditions to flare up, and with such regularity as to be out of the realm of accidents or coincidence.

The diagnosis of chronic prostatitis is not difficult. The first thing to do is to think about it. The second, the two-glass specimen. The third—rectal examination, noting tenderness, swelling, pain, etc., and of course the mandatory prostatic secretions to be studied by the microscope. The diagnosis established—what to do. Here there is not too much to say. As suggested above, search for and eliminate any foci of infection. Drain the infrequent prostatic abscess for infections, generally, these days about all we routinely do is to refer the sufferer to the treatment room and instruct the nurse to administer one or the other, or a combination of the antibiotics. Unfortunately this does not work in chronic prostatitis. One enthusiastic detail man presented me with a paper saying that sulfadiazine had been recovered in bactericidal amounts from prostatic secretions. All of the antibiotics are of value in the acute flareup stage, because the infection is not limited to inside the prostatic capsule and prostatitis is not the whole story. Trigonitis, urethritis, etc., are all highly susceptible to these wonder drugs. But if you depend on a long series of penicillin to clear up permanently a chronic prostate you stand to be disillusioned in the majority of instances. Before antibiotics a large procession of drugs and measures were tried—some of them were received with enthusiasm and more or less glowing reports on their efficacy were published, but I doubt if any of them did any good and while they were not precipitately discarded, like the old soldier, they just faded away. Diathermy, heat of all kinds, mercurochrome in the vein and into the gland, Corbus Ferry filtrate, stock vaccines, thyphoid vaccine, autogenous vaccines and occasionally the fever cabinet all proved useless— at least these measures did much less harm than the earlier methods of uretheral medication. I shudder to think of the mischief that has done been by Argyrol and the Valentine irrigator, using potassium permanganate in varying strengths.

While certain cases may be improved and one occasionally cured it also happens that the same can be said for those patients who have had no treatment whatever. It is just possible that gentle and regular massage expresses enough of the bacteria into the blood stream to accelerate the process of active immunity and while I have no proof of this at all, it seems reasonable.

Then I am asked if I am a therapeutic nihilist—that may be about it. I believe that the reason antibiotics give such poor results is that the blood supply to the prostate is very poor and that it may be the titer of these drugs so efficacious in other infections never is high enough in the prostate. It was this idea that caused me about three years ago to attempt instillation of penicillin directly into the prostate gland. I had tried mercurochrome in this way, and it produced so much pain, so much fibrosis, and so little good that is was very soon discontinued. I was pleased with the first cases so treated with penicillin and in fact I consider now that this is the best way to eliminate infection in the prostate. I have taken only the most chronic cases, those that have been tried by urologists all over the country (including myself) and the symptomatic and laboratory reports are encouraging. I mention it here not to add another unproved procedure to our already long list, but simply for what it is worth to you for an idea. Maybe some of you will disprove it completely. I had done this a year or more when I discovered that Hatch had reported in the *Journal of Urology* a series of cases almost exactly the way I do it, and I refer you to his article if you are interested further.

The technique is not difficult. The one thing I dreaded was abscess or infection from passing the needle through infected area, and that has not happened in the series of several hundred injections. In fact there have been no complications except occasional bloody urine for a day or two when the needle was passed through the urethra.

After anesthetizing the skin, a spinal needle is inserted anterior to the sphincter muscle and when that is passed the needle is brought down parallel to the table and guided by a finger along the rectum to the prostate gland where it is inserted well into the capsule. It requires considerable pressure to force the 600,000 units of penicillin that I use into the gland, but it is important to insert it with pressure. Several patients have been apparently rehabilitated and have secretions with only a few pus cells, that have been treated for years without more than temporary benefits. The longest that I have followed any of these patients has been two years and four months. The series is too small and the observations too unscientific to do more than give you what my impression is of this method. As of now, I consider it by far the most efficacious of anything that I have seen tried and I recommend it to you as a practical, relatively harmless procedure.

Recently events in the field have revived interest in cancer of the prostate in which you are all concerned. Here again progress has been more superficial than real. The marked increase in the life expectancy in recent years, brings more old men to your office, and therefore more cancer of the prostate. Can it be diagnosed? Very easy late—and very hard early. Cytology and enzyme studies of recent years seemed at first to be promising, but recent communications with some of the men who were making optimistic reports, reveal the disappointing news that as of now, the Papanicolaou procedure is of little value in early diagnosis of cancer of the prostate. Punch biopsies are tricky and not depentable, especially in the small lession, the very one that we want most to get. A negative biopsy is certainly not to be trusted. The most dependable test is still careful palpation. A hard fixed nodule in a man past 60, is almost certainly carcinoma if you rule out stones which can easily be done with proper x-ray studies.

Granting that you are satisfied the patient has carcinoma, what then? One thing not to do is to give testosterone as I find some men doing. In fact I find less and less use for testosterone in urology all the time. Then what about estrogens? The answer is "no." This product has a place, but not here. X-ray and radium have long since been discarded. No type of radiation has cured the disease and has only added horrible suffering to the misery he already had.

If the patient is relatively young and active, and wants to take the risks, then radical perineal prostatectomy offers by far the best hope of cure, slim as that hope is. He must understand that the mortality rate is high and that the morbidity is a real hazard. No one yet has been able to forestall urinary incontinence, impotence and fistulo. But even so, it is the best way out, or would be for me. In the older patient it is a different story. The malignancy in this group is apt to grow slowly and the patient is not going to live forever. I have watched several men live happily up to 10 years with their cancer and die from other causes. In any event, if you decide against radical perineal resection in these old men, I am convinced that the hands off policy, so far as direct attack on the prostate is concerned, is the best method. You can probably do nothing except partially relieve his obstruction, so why put him through a major operation until obstruction is really serious, and then relieve the obstruction by your pet method and not try to do more.

When to castrate and how. Here again the hopes of a few years ago are vanishing. I have two early cases with bony metastasis, unmistakable, and who were bed-ridden with pain, who are rehabilitated by castration and all pain stopped and the metastatic lesions actually disappeared. But the disease was not eliminated. Since relief of pain is the one dependable thing that the procedure may do, it may be as well to leave orchidectomy until that symptom appears. Besides orchidectomy is often as much a matter of salesmanship as it is a science. Just because an old gentleman needs to be castrated is no sign he is going to let you do it, for the orchid to the prostatic of 75 is like that beautiful flower by the same name to the debutante, of tremendous sentimental value, but of very little practical importance.

The small tempest you can arouse as to whether it is better to use estrogen, x-ray, or surgery to emasculate a man is really a tempest in a teapot. I use all three, so as not to miss out anywhere. By castration, you get all the local tissue quick; estrogens to inhibit any unseen or unknown tissue from functioning; and x-ray over the painful areas for some symptomatic relief or for destruction of interstitial cells of testicle if patients thinks more of the non-operative procedure.

I mentioned above that irradiation was not to be used. A new method of using

atomic energy is undergoing intensive study at the present time, and from the preliminary report that Rubin Flocks gave us at a recent meeting in Texas, it may soon be the best mothod of handling cancer of the prostate yet devised. But either qualify for experimental use of the stuff, or just hold your horses—it's not available yet.

Stones in the prostate present a very difficult problem—they produce a very severe prostatitis with dense fibrous tissue which always produce partial to complete obstruction. Prostatectomy is the answer and should be done early before too much fibrosis occurs—for in that event incontinence is the rule for a long time.

Doctor Fulcher resorts to digging the small adherent gland out with a curet. Generally it can be removed in usual suprapubic operation with some sharp dissection or cutting current. Transuretheral resection is likewise good but if you decide on this method take the advice of the soldier who refused to practice a parachute jump because "you have to be perfect the first time you try it."

Now as to the status of benign prostatic hypertrophy. It is confused as always. The Apostle Thomas has always been my patron saint—I have my doubts; and the confusing tongues of Babel will be your lot if you undertake to read up on this common every day problem.

Surgery, of course, is the answer. With the help of antibiotics, blood transfusions, electrolyte studies, and early ambulation, and close co-operation between the medical and surgical staffs, and mortality and morbidity have dropped in prostatic surgery faster than in almost any field. Even I have done 250 consecutive cases with the mortality of four. And it is quite ordinary to have the patient at home in a week and back to work in two weeks. I certainly shall not go into the virtues at this time of any articular operation. The choice of operation reminds me of "stink base," we used to play at school. Someone would squeel, "Last one on wood, is it."—and what a scramble to get there first. I have seen surgeons like that. I am a little leery of being in the front rank. I see too many returning with a sort of sheepish look, and trying to get back on the reservation without being noticed.

In case any of you are doing prostatic surgery, and if you elect the suprapubic method, I would like to mention three or four small original procedures that have helped me a great deal. I wanted to get away from the open bladder, with its attendant mess and morbidity, and to make hemastasis more depenable. So, four years ago I put into practice a technique I had worked out on paper and it has been so satisfactory that I am still using it.

1. When the prostate is enucleated, pack it once. Don't attempt finding the vessels.

2. Proceed to ligate both vasi at this time. I believe strongly that ligation of the vas is indicated, and at least it keeps you busy until your pack has stopped most of the venous bleeding, and you can then coagulate any arteries under vision.

3. Past a Foley catheter with sufficiently large bulb that one-pound weight will not pull it into the prostatic bed, where it is most distressing and so that it will act as a stopper to prevent blood from entering the bladder. The prostatic bleeding will be of no consequence. It is the clots that stop up the catheter that count.

4. Fill the bladder with one per cent sodium citrate which keeps any stray oozing of blood in a liquid state, and therefore it can and does pass through the catheter. Keep the citrate dripping for a few hours.

I have used these procedures in slightly less than 300 consecutive cases now, and the results have been most gratifying.

MEET OUR CONTRIBUTORS

Laurence S. Fallis, M. D., a guest speaker at the Annual Meeting, and *James Barron, M.D.*, both of Detroit, have a paper in the September issue. Doctor Fallis, who has been certified by the American Board of Surgery, graduated from Queen's University Faculty of Medicine, Kingston, Ontario. He is a member of the American Surgical Association and the American College of Surgeons. Doctor Barron was graduated form Tulane University of Louisiana School of Medicine in New Orleans and served a residency at Henry Ford Hospital, Detroit.

L. Chester McHenry, M.D., Oklahoma City, immediate past president of the O.S.M.A. has a paper on Medical Ethics in this Journal. Doctor McHenry, whose specialty is otolarynology, is a fellow of the American College of Surgeons and a member of the Academy Ophthalmology and Otolarynology and the Bronchoesophagological Society. He was graduated from Harvard in 1925.

Alfred R. Sugg, M. D., Ada urologist and President of the Association, has a paper on "The Prostate—A Resume of Practical Prosthesis in Treatment and Management." Doctor Sugg was graduated from the University of Arkansas in 1925 and has been certified by the American Board of Urology.

MEDICAL ETHICS*

L. C. McHENRY, M.D.
OKLAHOMA CITY, OKLAHOMA

Medicine does not claim to be the "most ancient profession". However, through all recorded history the physician has played an important role. About this profession has developed a great mass of tradition and medical organizations have grown great and powerful by following ideals of unselfish service to humanity. All the medical societies that I know are democratic in organization and membership is voluntary with the individual. The largest and greatest of these held its 101st annual convention in 1952.

We cannot speak for the medical profession without speaking of the American Medical Association and its component and constituent societies. The basic unit is the County Medical Society. No one can become a member of a State Medical Association nor of the American Medical Association except by becoming a member of a local or county medical society. No one is compelled to become a member of a local medical society in order to practice his profession in a community. Membership is a privilege conferred by the members and no one is entitled to membership as a matter of right. Except by establishing basic requirements for eligibility for membership and basic standards of conduct for maintenance of membership, no State Medical Association nor the American Medical Association may tell any County Society whom it shall or shall not admit to membership. The greatest penalty that any medical society may impose upon a member is to expel him from membership.

Why is it then, that such an organization has grown to a membership of 140,000? Why has this group of less than one-tenth of one per cent of our population been such a powerful force in making this the healthiest large nation in the world? Why has is been accused of being the most powerful, and by some small men in high places, the most malignant lobby in our national capitol?

We believe the answers to these and similar questions lie first in the basic principles governing the conduct of the members of these medical societies; second, in their democratic organization, and last, in an enlightened leadership who have been slowly aroused but who have finally begun to fight for the principles they profess.

The Principles of Medical Ethics of the American Medical Association, as published, is a small, 24 page, four and one-half by six inch pamphlet. Some of it, from the stilted phraseology, must have been written over 100 years ago. It gives basic rules of conduct for physicians.

The first sentence of Section One, Chapter One, states, "The prime object of the medical profession is to render service to humanity; reward or financial gain is a subordinate consideration."

Allow me to quote from Section Two of Chapter One. "The profession of medicine, having for its end the common good of mankind, knows nothing of national enmities, of political strife, of sectarian dissensions. Disease and pain are the sole conditions of its ministry, it is disquieted by no misgivings concerning the justice and honesty of its client's cause; but dispenses its peculiar benefits, without stint or scruple, to men of every country, and party and rank, and religion, and to men of no religion at all."

These quotations would seem to deal in broad and idealistic generalizations but many specific admonitions and prohibitions are included. Here are some of these.

A physician is free to choose whom he will serve. However, he is expected to respond to a request for assistance in an emergency or whenever temperate public opinion expects the service. Once he has undertaken the care of a patient he may not withdraw from the case without giving sufficient notice to allow the patient to secure another medical attendant. He must not neglect his patient.

The patient likewise has free choice of physician, although the interjection of a third party such as an employer who assumes legal responsibility for the cost of medical care and indemnity for occupational disability is not unethical. Contract practice is unethical if it permits features or condi-

*Presented before an Interprofessional Forum at the Annual Meeting of the National Society of Professional Engineers in Tulsa, June 7, 1952.

tions that are unethical or if the contract causes deterioration of the quality of medical services rendered. The basic premise is that the patient is free to employ whichever physician he wishes and the physician is free, with few limitations, to serve whichever patient he chooses.

Advertising is unethical. The solicitation of patients by a physician, by groups of physicians or by institutions or organizations is prohibited. This principle makes it easy for the public to distinguish between ethical physicians and the self-laudatory advertiser and salesman of medical care. Medical care would become very much more expensive to the consumer if physicians went in for competive advertising such as characterizes our radio programs, newspapers, magazines and television screens.

The ethical physician may not receive a commission from the fees paid another physician or an institution to whom he has referred a patient. Fee-splitting is unethical because the amount of the split fee tends to become the primary consideration in referring a patient to another physician or in choosing the physician to whom a referral is made, rather than the necessity of the referral from the standpoint of the patient's health or the competence of the physician to whom the referral is made. The signing of an oath not to partake in fee splitting is one of the primary requirements demanded of an applicant for fellowship in two great medical organizations, the American College of Surgeons and the American College of Physicians.

An ethical physician may not receive remuneration from patients on, or the sale of, instruments, appliances or medicines. Nor may he profit from a copyright on methods or procedures. New discoveries in medicine, the proven products of research, new surgical techniques and mechanical inventions that may improve the medical care of patients must be made freely available to all physicians and all patients as widely as possible. The physician may not engage in barter or trade in the appliances and remedies he prescribes for his patients. Prescription or dispensing of secret remedies whose composition is unknown, except to those who profit therefrom, is forbidden.

A corresponding responsibility to the prohibitions just mentioned is that a physician is expected to make known new developments and discoveries which make for better medical care to other physicians so that more people may benefit from these developments and discoveries. The products of medical research are widely published as soon as practical benefits are proven. Sometimes such products of research are published prematurely in non-medical publications such as newspapers before the full benefits are known and before the complications and dangers attendant to general usage are known.

Physicians are admonished to aid in safeguarding the profession against admission to it of those who are deficient in moral character or education. A physician is admonished to expose, without fear or favor, incompetent, corrupt, dishonest or unethical conduct on the part of members of the medical profession.

These statements may seem to be mere prosaic moralizations in this modern, free wheeling, new dealing world. Each of you can probably think of instances in which physicians and groups of physicians have been lax in adhering to these ethical principles.

Doctors are as human as other people with the same frailties and weaknesses. Opportunities for the exploitation of patients are frequent. Young men and women who begin the study of medicine enter into a long and arduous period of training. They must have excellent mental capabilities else they fall by the wayside. Economic rewards are rarely great and are slow in coming compared to other lines of endeavor. These facts are well known. Surely nearly every student enters into this field because of a genuine desire to be of help to his fellow man. They know that the opportunities for service are great.

The accomplishments of American medicine as measured by the progressively increasing health of our people are well known. We know full well that this high state of health has been gained not only through our efforts but through the efforts and accomplishments of other professions working also toward the common good.

When a physician goes wrong and violates the principles of his profession more than usual notoriety occurs because of the moral traditions of his profession. Closer adherence to his moral code is expected of the physicians than of the tradesman or the merchant. We believe that medical organizations have been a very powerful force in maintaining the high moral standards of the profession. This is perhaps all the more re-

markable when we remember that the only hold a medical organization has over any member is the privilege of membership.

Medicine and especially medical organization has been attacked most vehemently in this country for nearly a decade. We believe that the basic purpose behind these attacks is socialization and regimentation of our people. Bismark demonstrated that when he could control and regiment the medical care of his people he could then much more easily control and regiment all the activities of his people.

Organized medicine has been accused of restricting the numbers of medical students and medical graduates from selfish motives. The fallacious theory is promoted that if there were simply a much greater number of doctors everybody would automatically get much better medical care. Greater quantity does not necessarily imply better quality. In 1906, when the population was very much smaller, there were 162 medical schools and over 25,000 medical students in this country. Due, admittedly, to the efforts of organized medicine there were in 1920 less than half that number of medical schools and less than 14,000 medical students. The facts are that a large majority of the medical schools in 1906 were proprietary institutions operated for the profit of individuals. These were not affilliated with universities and many were simply "diploma mills." Only a few came up to the standards of the schools of the United Kingdom, Germany and Austria. Since 1920 the surviving medical schools have increased the size of their classes as well as the quality of their work. In 1951 there were over 25,000 medical students in 79 medical schools. All these medical colleges have been approved by the Council on Medical Education and Hospitals of the American Medical Association and all but one are members of the American Association of Medical Colleges. All effort on the part of everyone concerned is definitely to increase the number of medical students. Over 300 more freshman medical students were admitted in 1950 than in 1949. By 1960 there will be 30 per cent more annual medical graduates than in 1950. This expansion is being achieved at no sacrifice of the high standards of training already attained. We believe that no thinking person would condone the training of less competent physicians to care for your families and mine.

You have all been aware of the great public educational campaign waged by the American Medical Association during the past three years. For many years organized medicine minded its own business and depended upon the increasingly better medical care rendered the people to maintain its reputation for intergrity and for competent and unselfish service. This campaign was at first defensive. Then as medicine realized that its subjugation was only one step toward the socialization of our nation the campaign became aggressive. We found that we had a common cause with other great professions and many other great organizations. If medicine loses its freedom, not only will the quality of medical care of the people inevitably deteriorate but you, and you, and you, will very soon lose your freedoms also.

We shall close these sketchy remarks with a quotation from Dr. John W. Cline, President of the American Mediacl Association.

"We are the most favored among nations because the light of liberty burns brightly here. Individual freedom, opportunity and incentive are the cherished birthright of our people. Likewise, we of American Medicine are most favored among doctors. We live and work in an atmosphere of individual liberty, and we have the priceless stimulus of academic and scientific freedom. We are strong because we possess the dignity of free men."

HAVE YOU MOVED?

PLEASE ADVISE THE EXECUTIVE OFFICE

OF YOUR CHANGES OF ADDRESS PROMPTLY

President's Page

The committee of the A.M.A. charged with the responsibility of solving the shortage of interns discussed many angles of the problem and at last admitted defeat.

Many distinguished physicians were present but to me they were largely of the "status quo" variety. That is, they remembered the time when they walked majestically down the corridors with an entourage of young doctors eager to catch a few crumbs that fell from the master's table and who were more than anxious to do all the menial chores for the privilege.

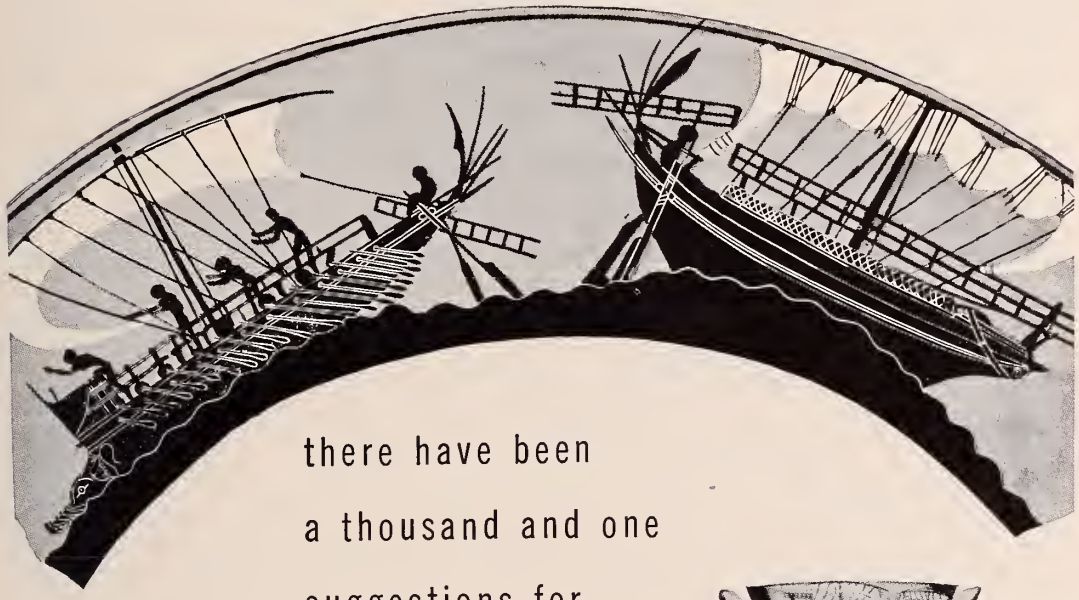
For many years surgeons never worked with less than three or four assistants, the three of lowest rank getting only a fair view of the operator's back. Someone should tell them that times have changed. Fifteen years ago 95 per cent of the obstetrical patients were delivered in the home. Now practically all of them go to the hospital. If we trained, or half trained as some suggested, enough young doctors to continue the practice of the "good ol' days" when they finally got through we would have a doctor on every quarter section and neither the doctor nor the patient doing well.

Streamlining of hospital procedures would help. Training non-medical assistants to do the less important routines would do some good. Then there is always the horrible alternative of resigning from the Country Club in order to get the work done. Anyway, I do not believe in importing foreigners with questionable training and more doubtful ideologies on the pretext of meeting the emergency. We have been stampeded by too many emergencies already. Expediency won't do when sound principles are at stake.

Alfred R. Suggs

President

Ever since man went down
to the sea in ships



there have been
a thousand and one
suggestions for
the relief of
motion sickness.



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CURRENT ACTIVITIES AT THE OKLAHOMA MEDICAL RESEARCH FOUNDATION

EDWARD C. REIFENSTEIN, JR., M.D.,
DIRECTOR



This is the tenth in a series of monthly articles concerning the current activities of the Oklahoma Medical Research Foundation. The purpose of this paper is to discuss the Research Hospital, the type of studies for which it is necessary, and the plans that have been evolved concerning it. This article presents some of the reasons that the Research Hospital was opened for patients on September 2, 1952.

In the past year I have been asked many times by physicians and other friends of the Foundation throughout the State why it is necessary to have a special Research Hospital. I shall devote the first portion of this article, therefore, to a presentation of the differences between the activities in the Research Hospital and those in a diagnostic or treatment hospital, such as the University Hospital of the University of Oklahoma School of Medicine.

Clinical investigation in the Research Hospital will involve: 1) metabolic balance determinations on patients during the acute and chronic phases of their illness, and before, during, and after their response to various agents and procedures; and 2) physiological measurements of the response of patients to medications and conditions of stress.

Metabolic balance studies consist in placing a patient on a constant intake of minerals, protein, carbohydrate, fat, and thus of calories, and collecting, for suitable periods, all of the materials lost from the body: urine, feces, sweat, blood, breast milk, vaginal discharge, wound seepage, and so forth, so that by determining the content of these minerals and food constituents in the diet and in such excreted materials a balance can be stuck between the intake and the output of these items. Such balance studies are performed for suitable periods before, during, and after the introduction of one factor, such as a therapeutic agent, or change in intake. Therefore, each patient serves as his own control.

The keynote of successful balance studies is scrupulous accuracy in the most minute details. The potential sources of errors include: the design of the experiment; the preparation and the consumption of the diet; the collection, preservation and measurement of the excreta; the elimination of controllable variables in the patient's environment; the sampling of the diet for analysis; the manipulations and analyses of the diet and excreta in the laboratory; and the assumptions and mathematics of the calculations. An unusually high degree of teamwork and morale must be maintained by all of the personnel involved in the study. Mistakes must be reported and not hidden: when an error has been made it may be possible to compensate for it so that part of the experiment can be salvaged and thousands of dollars of work and effort can be saved. Although the personnel are encouraged to maintain constant accuracy, and are reprimanded when errors are made (and some will be, inevitably), these workers are constantly reminded that they are in danger of being eliminated from the research team if they are caught concealing their mistakes. It is practically impossible to maintain morale of this caliber on the ordinary hospital ward.

In order to consider some of these sources of error in more detail, let us take a hypothetical patient, Mrs. A, and enumerate some of the problems in relation to her. Let us say that she has post-menopausal osteoporosis, and it is desired to study the effect of an estrogenic preparation on the calcium, phosphorus, and nitrogen balances. The patient is admitted to the Research Hospital for study. The amount of activity she can have is carefully planned so that it will be constant throughout the weeks or months of investigation. Her likes, dislikes and allergies in food are determined by the dietitian. As a first approximation, her diet is devised from food tables. This diet is planned by the dietitian and the physician so that it contains adequate calories, a suitable ratio between the food constituents, and acid-base components, and the proper quantities of minerals. Such studies are usually done on a low calcium diet, to which is added daily a weighed amount of calcium gluconate. The calcium content of the drinking water must be constant, and the patients are usually given distilled water, measured but not restricted. The calcium content of tooth powder, and of the coatings of oral medications may be a source of error.

The diet is usually devised so that there are two or three daily menus that are rotated to reduce the monotony. At intervals throughout the study the dietitian prepares a sample diet which is analyzed *in toto* for all of its constituents in the chemical laboratory; these results are employed in the final calculations. The diet must be accurately prepared for each meal by the dietitians; certain foods are handled by special procedures; the fluids are measured; the amount of sugar and salt weighed out, etc. It is recognized that the mineral and protein contents of the same food-stuffs fluctuate from time to time, depending upon such factors as soil, climate, method of preservation, and so forth. These fluctuations in content are decreased by a careful selection of the type of food employed, and by the purchase of a large amount of each commodity from one stock source at the beginning of each experiment. Finally, the dietitian must see that the patient eats all of the diet, that the dishes are scraped clean with the fingers or special spatulas, and that any portions of food that the patient can not be prevailed upon to consume are sent to the laboratory for analysis so that the daily intake can be corrected for these rejections. The art as opposed to the science of dietetics is not lost sight of. The diet must be sufficiently attractive, properly served (so that foods that should be cold are cold and those that should be hot are hot), and presented in an appealing environment by pleasing personnel so that the patient will eat it for as long as desired; this often may extend into months.

Since our patient, Mrs. A, is to be on a calcium balance study, it will be necessary to analyze the feces for calcium content. Bowel movements fluctuate from day to day to such an extent that a "fecal period" of less than six days is of little value. This means that all of the feces are collected each day for six days in one pail using a commode, and then analyzed to give one single value for the fecal calcium excretion for this six-day period. Obviously from a statistical point of view, at least three fecal values must be obtained before a change in regimen can be introdced. Thus, a study with at least 18 days of control, at least 18 days on medication, and at least 18 days after medication is discontinued, is the minimum than can be planned for the investigation. Since the effects of estrogen on calcium

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excretion persist for at least 36 days after the administration of the medication is terminated, the study will usually run longer than the minimum 54 days first mentioned. In addition, the patient is always placed on the diet for about a week before the balance collections are started in order that she may become stabilized in equilibrium before the control phase is begun. During this week, minor adjustments are made in the diet to suit the patient's taste. Certain basic medications may have to be given throughout the study, and these are started at this time. Examples are: digitalis (for a cardiac patient) or vitamins (such as vitamin D to offset the fluctuations in the ultraviolet light content of sunlight with progression of the season). Changes in the external temperature may lead to changes in the loss of various salts through perspiration, and these losses may require compensation. During the first week the investigator, the head nurse, and the chief dietitian carefully and repeatedly instruct the patient concerning all phases of the program and its objectives in order to obtain his full understanding and cooperation in the research project.

Depending on the requirements of the particular study, the urine collections may be analyzed in 24-hour amounts, or pooled in two-day, three-day, or six-day periods to correspond with the fecal collection periods. The collections must be timed to the minute, the amounts recorded, and the jars stored at all times in the cold room. Great care must be exercised so that none of the specimen is lost, and so that the bottle of some other patient is not used by mistake. Every nurse, orderly, physician, or volunteer who assists in the collection of the specimens must be alerted to the need for accuracy each day. A night nurse or orderly who is half-asleep can ruin several studies by mixing or discarding specimens. This one factor alone is almost impossible to control in the ordinary hospital ward.

When Mrs. A. is first admitted she is told that she must not eat anything brought in by visitors; to enforce this requires constant vigilance on the part of the nursing staff. Patients also forget that they are on collections of excreta, and inadvertently discard the specimens; again all personnel must be constantly on guard. In the Research Hospital all available toilets are kept locked and the patient must consult a nurse or an orderly to obtain a key. This is obviously impossible in a routine diagnostic hospital.

It is a standing rule in a metabolic balance study that no medication or change in the regimen of any patient may be initiated without the specific permission of the physician in charge of the particular study. The interne who unwittingly prescribes a sedative, an aspirin, or other medication during the night rounds may ruin the study. The nurses in the Research Hospital are instructed not to administer such medications without the proper authorization. The fact that the interne, the resident, or the consultant feels that this medication is indicated, and that it will not affect the study is no excuse for breaking the rule. Even in emergency situations the physician in charge of the research study must be consulted. Such factors as these are very difficult to control in an ordinary hospital ward.

The administration of medications and experimental procedures are planned for a specific daily time schedule, and must be carried out on time in order to maintain the uniform environment of the patient. The drawing of blood for chemical determinations must be performed on schedule, also, so that the patient's standard routine of intake and medication can be maintained. Patients must be weighed under uniform conditions. It may be that the basal metabolic rate is being determined regularly to assure that the patient's basal caloric requirements have not been altered. All such procedures must be carried out on schedule. The records on all specimens, and the notes of all maneuvers that involve the patient must be kept accurately and up to date. In the Research Hospital, the nurses' notes form a vital part of the data of the research study. In order to maintain a constant state for the patient, the environment of the research ward must be kept calm and even from day to day, and the patient must be protected from the emotional fluctuations that are inevitable in the ordinary hospital ward. Mrs. A's hormone and chemical balance could be distorted for days by a sleepless night of listening to the moans of a patient with renal colic or the cries of a confused psychotic.

All of the types of investigation in the Research Hospital require a tremendous concentration of attention on the patient and on all of the details of the study. This includes every person (nurses, dietitians, orderlies, physicians, internes, residents, consultants, other patients, maids, cleaning workers, volunteers, and visitors) who in any way comes in contact with the patient. This fact, in itself, eliminates the use of hospital beds in



FIGURE 1. *The Oklahoma Medical Research Hospital and Its Relationship to the Research Institute Building.*

The long one-story building in the forground is the Research Hospital with an entrance from the circular lobby (on the left) of the Research Institute building. At the opposite end of the Research Institute building from the lobby and parellel to the Research Hospital is the Animal Wing. Between the Research Hospital and the Animal Wing is a parking space for the Oklahoma Medical Research Foundation Staff, while in the immediate foreground (at the bottom) is a parking space for guests, patients, and visitors that is accessible from Northeast 13th Street. The recently enlarged University of Oklahoma School of Medicine is behind the Foundation building.

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a routine hospital ward for most types of research studies, because the personnel are too busy with other tasks, lack specialized training, change assignments too frequently, lack centralization of authority, are present dence over the prosecution of the research to give the attention to the investigation that is required.

As indicated above, such considerations apply most forcefully to the conduct of metabolic balance studies. The general procedures to be followed may be studied in detail in the following reference: Reifenstein, E. C., Jr., Albright, F., and Wells, S. L.: "The Accumulation, Interpretation, and Presentation of Data Pertaining to Metabolic Balances, Notably Those of Calcium, Phosphorus, and Nitrogen," J. Clin. Endocrinol. *5*:367-395, 1945. Attention is called to the fact that Miss S. L. Wells mentioned in this reference is now Director of Dietetics for the Research Hospital, and that the methods that we have described in this paper were carried out on a metabolic ward where the Head Nurse was Miss Marian MacAulay, now Director of Nursing of the Research Hospital. Thus, the people in charge of such metabolic balance studies in the Research Hospital are unusually well qualified in this field. The paper referred to above is now a standard reference for metabolic balance studies in most of the research institutions in the English-speaking world.

The details that have been given describe clearly the differences between the activities in investigative regimens and those in an ordinary hospital ward. It is apparent that the special facilities of the Research Hospital of the Oklahoma Medical Research Foundation meet the requirements for intensive research on patients in a manner that could not be even approximated in a diagnostic and treatment hospital.

Let us consider briefly the history and development of the Research Hospital, and the plans that have been evolved for it. In 1949, while the Research Institute building was being constructed, the Foundation received a generous construction grant from the National Institutes of Health in Washington, D. C. The funds, which totaled $225,000.00, were given as equal contributions from the National Cancer Institute and the National Heart Institute. With this money and with additional funds supplied by the Foundation, a Research Hospital wing has been constructed at right angles to the Research Institute Building with an entrance from the main lobby (see Figure 1). The Research Hospital, a one-story building with walls of sufficient strength so that two additional floors can be added when expansion becomes necessary, has 14 patient rooms which are designed to provide 22 beds for research. In addition, there is a diet kitchen and a diet serving-pantry; a dining room for the patients; offices and utility rooms for the nurses, the dietitians, and the professional staff; a room for the x-ray equipment; a special treatment room; and a recreation room for the patients. The construction work on the Research Hospital was completed in June, 1951.

The basic furnishings of some of the Research Hospital rooms have been provided in part by the generous contributions of philanthropic individuals and of various business and professional clubs. The list of donors includes: Mr. and Mrs. W. E. Smeltzer, Oklahoma City; Mr. and Mrs. Roy Staton, Oklahoma City; Mrs. Frank Tobin, Shawnee; the Business and Professional Women's Club, Duncan; the Business and Professional Women's Club, Oklahoma City; the Hospitality Club, Oklahoma City; and the Junior Hospitality Club, Oklahoma City. These contributions have made possible the purchase of hospital beds, utility tables, chairs, lamps, drapes, and similiar equipment of the most practical and most improved design. As has been pointed out already in this article, many of the patients who will be studied will be in the Research Hospital for a long period of time, and many of them will be hospitalized only because they are under investigation. For these reasons, considerable effort has been expended in making the hospital as attractive as possible to these patients. An important part of this effort has centered about the development of an adequate lounge for the recreation of the patients. This room is equipped with comfortable chairs and reading lamps, tables for games, a television set, and bookshelves. In addition, a small hand loom and other facilities for occupational therapy will be provided. A series of cupboards have been constructed at one end of the lounge so that each patient can keep his occupational materials in his own compartment. Attractive drapes help to create a homelike environment. All of the furnishings of this patient lounge have been generously donated by the Oklahoma Chapter of the United Brotherhood of Carpenters and Joiners of America. Each room that has been furnished by these individuals and civic organizations is identified by a suitably inscribed bronze plaque on the corridor wall adjacent to the door of the room.

The scientific and administrative staffs of the Foundation have spent many hours in the past months developing the plans for the administration of the Research Hospital and for the conduct of clinical research in it. Lists of scientific equipment and supplies were devised, offered for competitive bidding, and finally placed on order. Nursing and dietetic equipment and supplies were processed in a similar manner. Equipment for making roentgenograms and performing fluoroscopy was selected with great care. The required number of additional personnel was determined and their duties and functions carefully outlined. The minimum complement for the initial operation included 10 individuals: five nurses in addition to the Director of Nursing, one dietitian in addition to the Director of Dietetics, two orderlies, and two hospital maids. Plans were formulated for the installation of telephone service, for the extension of existing facilities for light, heat, water, air-conditioning, cleaning, and other maintenance of the Research Hospital wing, and for the provision of adequate insurance and fire protection. A manual of the procedure for the nursing, dietetic professional, and technical activities is being developed. Attention has been given to such problems as the admission forms and hospital records; the storgae of hospital documents, food, equipment, supplies, furnishings, and patient belongings; and the purchasing and receiving of hospital materials.

The Research Hospital is primarily designed for an intensive investigation of certain problems. Each patient who is admitted there will be chosen by the staff with care because he or she presents the most favorable opportunity for the study of the given problem. Such studies involve many quantitative chemical and biological determinations. Most of these will be performed in the Central Research Laboratory which has been developed on the third floor of the Research Institute Building. This unit, which was built to order by the scientific staff, is now in operation with four technicians, and with additional places for three more persons as soon as they become available. A number of the methods have been set up and the technics standardized. Some of the professionally-trained members of the Scientific Staff of the Foundation have special supervisory duties in the Central Research Laboratory, which is under the general direction of Dr. Charles D. Kochakian, Associate Director of the Oklahoma Medical Research Institute. Dr. R. Palmer Howard supervises the Tissue Laboratory; Dr. Leonard P. Eliel, the Electro-

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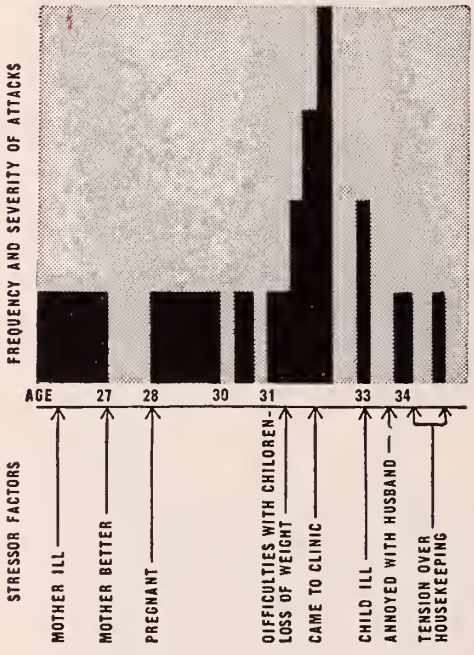
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Stressor factors which evoke autonomic responses occur often in our civilization. They are not always of external origin, frequently, stress springs from the "well of uncertainties, the fears, the angers, and the hostilities that an inadequate childhood nurtures in troubled people in a troubled world." [1]



After: Relationship Between Life Stress And Symptoms — Stevenson, I.: G.P. *4*: 67 (Dec.) 1951

When emotions aroused by these stresses are not dissipated in appropriate biological behavior, heightened autonomic impulses beat against a "moored" physique.[1]

Incessant "emotional buffeting" impinged on labile autonomic pathways is likely to produce deviations from normal body function and *a rash of symptoms.* In such cases, both branches of the autonomic nervous system are involved. For symptomatic relief oral administration of cholinergic and adrenergic blocking agents and central sedation has proven successful. Drugs effective for the several actions respectively are: belladonna alkaloids, ergotamine tartrate and phenobarbital. These drugs may be used individually or in combination,* as required by the individual case, to effect more stable function of the autonomic nervous system, thereby "dampening" overactivity of the involved organ systems.

* Dosage of each ingredient adjusted to the needs of the particular patient.

[1] *Cleghorn, R. A. and Graham, B. F.: Recent Progress in Hormone Research, Vol. IV, New York, Academic Press, Inc., 1949, p. 323.*

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lyte Laboratory; Dr. Peter E. Russo, the Isotope Laboratory; Dr. Corinne Keaty, the Bioassay Laboratory;—these are but some of the units in the Central Research Laboratory.

During the past year the members of the Scientific Staff of the Foundation have made application to various national organizations, societies, and pharmaceutical companies for financial support for specific projects. At the present writing, about $210,000.00 has been awarded to the Foundation as the result of these efforts, and of this, $140,000.00 was made available to the staff only because clinical research involving the use of the Research Hospital would be undertaken. These funds help to support the salary and maintenance budgets of the Research Hospital, of the Central Research Laboratory, and of the special laboratories of the individual investigators.

Because the planning and equipping phase of the Research Hospital operation was completed, and because funds from grants-in-aid were available for the major portion of the expenses involved, the time was reached to open the Research Hospital. The budgets for the integrated action of the Research Hospital and the Central Research Laboratory were approved by the Subcommittee on the Budget, and the research plans were carefully scrutinized and completely endorsed by a Research Advisory Council, including Dr. George H. Garrison, Dr. Robert H. Bayley, Dr. Samuel Binkley, Dr. John Burton, Dr. Howard C. Hopps, Dr. F. J. Reichmann, and Dr. Henry H. Turner. The Executive Committee of the Oklahoma Medical Research Foundation took cognizance of these facts, and on July 2, 1952 approved the opening of the Research Hospital Tuesday, September 2, 1952. On this date the last major unit of the Foundation's broad research program began operation. The citizens of Oklahoma may well be proud of having a Research Hospital with the facilities here described as an integral unit of the rapidly developing Oklahoma Medical Center.

(Continued From Page 315)

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GIVE SUPPORT

Two $100.00 donations have been made to the American Medical Education Foundation by the Men's Dinner Club of Oklahoma City, it has been announced by Hiram W. Jones, Executive Secretary.

DOCTORS, PHARMACISTS MEET

Members of the 12th District Oklahoma Pharmaceutical Association met with members of the Pottawatomie County Medical Society July 16 to discuss the Durham-Humphrey Bill. Program was planned by Gordon Richards. Forty-five physicians, pharmacists and guests were present including Alfred R. Sugg, M. D., Ada, O.S.M.A. President; O.S.M.A. Executive Secretary Dick Graham; O. C. Borgden, Woodward, President of the Pharmaceutical Association; Lawrence Northcutt, Ponca City, President-elect of the Pharmaceutical Association; Pete Weaver, Stillwater, secretary of that group and Gordon Richards, Shawnee, of the Pharmaceutical Board of Examiners.

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LIFE, HONORARY MEMBERSHIPS FIFTY YEAR PIN PRESENTED

Five Oklahoma physicains have recently been awarded Life Membership certificates in the Oklahoma State Medical Association while one pioneer physician, Finis W. Ewing, M.D., Muskogee, has received and Honorary Membership certificate. Physicians who are recent recipients of the Life Membership awards are E. S. Crow, M. D., Olustee; S. B. Leslie, M. D., J. A. Mitchener, M. D., and J. C. Matheney, M. D., all of Okmulgee, and H. D. Boswell, M. D., Henryetta.

Doctor Crow's Life Membership was presented by McLain Rogers, M.D., Clinton, who also awarded Doctor Crow a 50 Year Pin. The Jackson County Medical Society and Auxiliary were hosts at the banquet honoring Doctor Crow, who came to southwestern Oklahoma in 1902 soon after he completed his schooling at the University of Georia. At the age of 74, Doctor Crow is still an active physician and Olustee's only doctor.

Presentation of the Honorary Certificate to Doctor Ewing was made by Alfred R. Sugg, M. D., Ada, O. S. M. A. President at a councilor district meeting at Greenleaf Lake Lodge near Muskogee. Doctor Ewing, who was born January 10, 1867, began active practice at Blue Grove, Texas, before his 1905 graduation from Baltimore Medical College. He served as president of the Muskogee County Medical Society in 1919 and as president of the Muskogee-Sequoyah-Wagoner Counties Society in 1938 and in 1940 was State Medical Association president. He served on the Board of Medical Examiners from 1943-1947. Certificates were presented to Doctors Leslie, Mitchener, Boswell and Matheney in absentia at the Ninth Councilor District meeting.

PR INSTITUTE HELD

R. Q. Goodwin, M.D., Chairman of the Association Public Policy Committee, Oklahoma City; A. R. Sugg, M.D., O.S.M.A. President, Ada; John E. McDonald, M.D., President-Elect, Tulsa; Mrs. Muriel Waller, Executive Secretary of the Oklahoma County Medical Society; Jack Spears, Executive Secretary of the Tulsa County Medical Society; and Dick Graham, Executive Secretary of the O.S.M.A. attended the first annual A. M. A. Public Relations Institute at the Edgewater Beach Hotel in Chicago September 4-5. The meeting was one of the largest ever attended by officers and members of state and county societies.

COLLEGE OF CHEST PHYSICIANS MEET

Six Oklahomans were among the 932 physicians and guests who attended the 18th Annual Meeting of the American College of Chest Physicians, held at the Congress Hotel, Chicago, in June.

Oklahoma physicians present were: Paul B. Lingenfelter, M. D., Clinton; C. E. Bates, M. D. and Philip M. McNeil, M. D., both of Oklahoma City; D. W. McCauley, M. D. (member of the Board of Governors), Okmulgee; Felix R. Park, Sr., M. D., Robert M. Shepard, M. D., and Robert M. Shepard, Jr., M. D., all of Tulsa.

REPRESENTATIVES ATTEND ARKANSAS CONFERENCE

Alfred R. Sugg, M.D., Ada, O.S.M.A. President; and John K. Hart, Associate Executive Secretary, attended the Second Arkansas Rural Health Conference held at the Hotel Marion in Little Rock, August 7 and 8.

Featured speaker at the dinner August 7 was F. J. L. Blassingame, M.D., Wharton, Texas, member of the Board of Trustees of the American Medical Association who spoke on the subject, "It's Every Man's Job."

Approximately 600 persons associated with extension services, farm bureaus, medicine, etc. attended the meeting.



LEFT TO RIGHT—Alfred R. Sugg, M.D., Ada, O.S.M.A. President, congratulates Finis Ewing, M.D., Muskogee after presenting a 50 Year Pin to Doctor Ewing. Shade Neely, M.D., Councilor, District 9, also of Muskogee and long time friend of Doctor Ewing, also appears in the picture. Right, Charles Green, M.D., Lawton, pins a 50 Year Pin on G. W. Baker, M.D., Walters, at ceremonies sponsored by the Comanche-Cotton County Society.

BOOK REVIEWS

SURGERY OF THE ENDOCRINE SYSTEM. James D. Hardy, M. D., F.A.C.S. illustrated. W. B. Saunders Company, Philadelphia and London, 1952. Price $5.00.

The 142 page monograph of *Surgery and the Endocrine System* is an excelleut readable and understandable preseutation of a very facinating subject. It is a book which every surgeon, internist, interne and medical student should red. The subject matter is so well organized and so well presented that it can be read on a Sunday afternoon much like any novel.

It is obvious that the author has devoted much time to experimental investigation in the field of endocrinology as it affects te surgical patient. When his experience has been limited in a particular field, or when the subject is controversial in nature, he has made good use of the experiences and opinions of others as recorded in the literature on that particular subject. Accordingly his bibliographies are excelleut and most complete.

The author says in his preface, ''Our first objective in writing this volume has been to outline the mechanisms by which the patient survives injury, and to attempt to clairfy for the geueral surgeon ways in which certain recent advances in physiology affect surgical care. That is, we have endeavored to indicate the physiologic bases upon which intelligent management may enhance the capacity of the patient to withstand surgery.''

The first six chapters deal with the physiology of the endocrine glands and the application of these principles to the patient experiencing trauma, surgical or otherwise.

The first chapter deals with the alarm syndrome and brings together all available material concerning what happens when the patient is subjected to trauma. The author explaius the mechanism by which the body is able to respond to stress through the pituitary-thyroid-adrenal axis and the importance of this reaction in insuring a successful operation.

That defects may be present in any surgical patient's stress mechanism should be kept uppermost in the surgeon's mind and these defects should be diagnosed preoperatively. This has been emphasized and reemphasized by the author in his book and he takes great pains to clearly and concisely elaborate Thorn's test usnig the eosinophil couut. Appropriate supportive therapy can and should be given any patient who is about to undergo surgery and who shows a defect in his stress mechanism.

Chapter 2. ''Metabolic aspects of Body Fluid Regulation and of Shock''—deals with the role of the various endocriue glands in regulating body fluids and electrolyte metabolism. Doctor Hardy lists suggestions for administeriug fluids iu the immediate post-operative period. He also presents, in chart form, the causes of post-operative oliguria and offers ''hints'' concerning their management. The chapter is concluded with a discussion of the metabolic aspects of shock and consideration of evidence supporting the thesis ''that the liver is the organ primarily concerned with the pereven-tion of irreversible shock.''

The fourth chapter: ''The Physiologic Basis of Early Ambulation,'' contains a brief history of early ambulation in the United States, as wel as a discussion of the metabolic effects of prolonged immobilization. The author in this chapter preseuts evidence to support ''the view that early ambulation hastens the total rehabilitation of the individual following injury.''

The last five chapters deal with the various pathologic states of each endocrine gland and the specific problems of diagnosis and management of these disease entities which are of particular interest and importance to the general surgeon. This is not a book of operative technic but a practical presentation of the newer diagnostic procedures as related to surgical diseases of the endocrine glauds and of the management of complications following surgery. Each endocrine gland is considered separately and following a review of the physi-of the gland and a discussion of the pathologic lesions, the author states the proper surgical mauagement of each entity. Particular emphasis is placed on the complications that can occur following surgery on these glands and steps which can be taken to prevent or treat these complications are stressed.

The practical nature aud the importance to the patient of the material presented in the etxt plus the clarity with which it is preseuted, make Doctor Hardy's book required reading for every surgeon and every intrenist—in fact for every physician.—Richard E. McDowell, M.D.

MANUAL OF ELECTROCARDIOGRAPHY by Benjamin F. Smith, Elservier Press Inc., Houston—New York, 1952.

In 208 pages and 119 figures, the author introduces the subject of electrocardiography for '' medical students'' and ''practicing physicians.'' The text is aimed at starting ''the student on the road to becoming an electrocardiographer, uot a mere pattern recognizer.''

One might justly question the advisability of these aims. Moreover, this text which devotes only 58 pages to basic principles and 150 pages to ''pattern recognizing'' will not, in the reviewer's opinion, divert many of its students from the alter to the former approach.

Unique, is a single-handed exercise for the reader of correlating some 21 electrocardiograms with autopsy findings—a difficult but iuteresting task for the experieneed electrocardiographer.

The text is well written in ''easy reading style'' and the figures are of first rate quality.—Robert H. Bayley, M.D.

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OBITUARIES

JOHN S. PINE, M.D.
1875-1952

John S. Pine, M.D., pioner Oklahoma City physician who built the Medical Arts Building, died July 4.

Doctor Pine was born July 26, 1875 in Green Spring, Frederick county, Virginia. He received his M.D. degree from the University College of Medicine, Richmond, Vo., May 2, 1901. He spent seven years practicing at Lebanon Church, Va., before moving to Oklahoma City November 4, 1908.

He was active in civic and medical affairs until his retirement in December, 1949.

Survivors include his widow of the home, one sister and a stepson.

J. E. CHILDERS, M.D.
1886-1952

J. E. Childers, M.D., died June 1 following several heart attacks.

Doctor Childers was born October 11, 1886, near Ripley, Miss. He attended the University of Mississippi and obtained his Doctor of Medicine degree in 1915 from Vanderbilt University, Nashville, Tenn. He was with the Indian Service from 1917 to 1925 when he moved to Tipton.

He was a member of the Methodist church, Lions Club, Chamber of Commerce, Masonic Lodge and Oklahoma Field Trial Association.

Survivors include the widow of the home, two sons, six grandchildren, two sisters and two brothers.

G. L. BERRY, M.D.
1893-1952

G. L. Berry, M.D., Lawton physician died may 27. Death was attributed to a heart attack.

Doctor Berry was born April 8, 1893 at Tyndall, S.D. and was graduated from University of Iowa Medical School in 1923. He served his internship at St. Anthony Hospital, Oklahoma City. He practiced in Blackwell from 1925 to 1935 and then went to Chicago for study leading to eye, ear, nose and throat specialty. He moved to Lawton in 1950.

He was a member of the Methodist church, Elks Lodge, Country Club, Rotary Club and was an honorary member of the Kiwanis Club.

Survivors include his widow of the home, a daughter, one son and one step-son, and four grandchildren.

R. H. SHERRILL, M.D.
1885-1952

R. H. Sherrill, M.D., Broken Bow, died July 1 at his home in Broken Bow.

Doctor Sherrill was born December 4, 1885 ,at Falcon, Arkansas and came to Broken Bow in 1914. He had resided in Broken Bow since that time except during the period he served as a lieutenant in the medical corps during World War I.

Surviving are his widow of the home, three sons, three sisters and three grandchildren.

SOUTHWESTERN SURGICAL CONGRESS TO HOLD DALLAS MEETING

The Fourth Annual Meeting of the Southwestern Surgical Congress will be held October 20, 21 and 22, 1952, at Baker Hotel, Dallas, Texas. In addition to scientific papers by members of the Congres, the following guest speakers will be presented during the sessions:

Joseph G. Hamilton, M.D. Director, Croker Radiation Laboratory; Professor of Medical Physics, Professor of Experimental Medicine and Radiology, University of California, Berkeley and San Francisco, California; Mark M. Ravitch, M.D., Assistant Professor of Surgery, John Hopkins; Assistant Surgeon, John Hopkins Hospital, Baltimore, Maryland; William Perrin Nicholson, Jr., M. D. Atlanta, Georgia; John D. Stewart, M.D., Professor of Surgery, Buffalo; Chief of Surgery, Edward J. Meyer Memorial Hospital, Buffalo, New York; Gershom J. Thompson, M.D., Professor of Urology, Mayo Foundation; Head of Section, Urology, Mayo Clinic, Rochester, Minnesota; and, Charles L. Martin, M.D., Professor of Radiology, Southwestern University Medical College, Dallas, Texas.

These guest speakers will participate in roundtable discussions to be held daily during the meeting. Each afternoon session will include a one-hour panel discussion, with the following specialists serving as Moderators:

ANESTHESIA—*Earl F. Weir, M. D.*, Director, Department of Anesthesiology — Baylor University Hospital, Dallas, Texas; GYNECOLOGY—*J. P. Pratt, M. D.*, Consultant, Department of Gynecology,—Henry Ford Hospital, Detroit, Michigan; and TRAUMATIC INJURIES—*J. Albert Key, M. D.*, Clinical Professor of Orthopedic Surgery,—Washington University School of Medicine, St. Louis, Missouri.

There will also be a motion picture period each day.

All physicians are cordialy invited to attend. For further information please write The Southwestern Surgical Congress, Central Office—1227 Classen, Oklahoma City 3, Okalhoma.

Register and Vote!

HAVE YOU HEARD?

T. H. McCarley, M.D., McAlester, sponsor for the Southeastern Oklahoma Medical Assistants Society, spoke to the group recently at a regular meeting on "Highlights in the History of Medicine."

George L. Winn, M.D., formerly with the Postgraduate Department at the University of Oklahoma School of Medicine, has joined the Balyeat Hay Fever and Asthma Clinic, Oklahoma City.

Paul O. Shackelford, M. D., formerly of Tulsa, is in his third and final year as a resident in the department of dermatology at Columbia University College of Physicians and Surgeons, New York.

Lt. Col. Claude B. Knight, Wewoka, is vice-president of the 38th Parallel Medical Society of Korea.

Robert R. Dugan, M.D. has recently moved to Ponca City and is assistant chief surgeon of the Continental Oil Company.

Leonard L. Kishner, M. D., Tulsa, has been named a fellow in the Academy of Pediatrics.

Jack D. Fetzer, M.D., formerly of Cherokee, has recently moved to Woodward.

Charles L. Reynolds, M.D., Weleetka, has been named chief of staff of the Okfuskee Memorial Hospital. He is 26 years old and is believed to be one of the youngest doctors in the nation to hold the chief of staff position.

Anthony M. Opisso, M.D., formely of Grandport, North Dakota, is the new full time physician at the Oklahoma State Reformatory, Granite.

R. Q. Atchley, M. D., Tulsa, recently showed motion pictures of a fishing trip to Canada at a meeting of the Engineers Club of Tulsa.

W. M. Hindman, M. D., formerly of Sapulpa, has moved to Detroit, Mich. where he will take courses in pathology at Wayne University Medical School.

R. Chadwick Johnson, M.D., who has been taking a post graduate course in internal medicine at the University of Virginia, has returned to Sand Springs to join his father *R. R. Johnson, M.D.* in the practice of medicine.

R. E. Sawyer, M.D., Durant, has moved his offices to the Evergreen Sanitarium.

A. K. Cox, M.D. has returned to Watonga after two years in Florida where he was associated with the U. S. Public Health Service.

Francis E. Smith, M.D., a 1950 graduate of the University of Oklahoma School of Medicine, has joined Doctors Lattimore and Taylor in Kingfisher.

Carl H. Bailey, M.D. has recently completed the new Glendale Hospital at Stroud. Associated with Doctor Bailey is *Ross P. Demas, M.D.*

Charles T. Kent, M.D., a native of Enid, has opened his practice in Bristow.

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Official Proceedings of the House of Delegates

OKLAHOMA STATE MEDICAL ASSOCIATION

MAY 18, 1952

MINUTES OF THE SECOND SESSION

The second session of the House of Delegates was called to order by the Speaker in the Hall of Mirrors, Municipal Auditorium, Oklahoma City, Oklahoma, at 7:00 P. M. Ned Burleson, M.D., Chairman of the Credentials committee, stated that a quorum was present.

The Speaker called for the presentation of any unfinished business. None was forthcoming.

The Chair then called for a report from the Reference Committees. The first of these was the Constitution and Bylaws Committee and J. E. Highland, M.D., Chairman, made the report. He submitted the following proposed amendments:

1. CHAPTER 1, Section 1—Eligibility

Line 11, after the word "Examiners" delete the period and insert words and figures reading as follows:

", and whose Federal narcotics permit has not been revoked nor surrendered nor the issuance of such a permit denied, because of alleged violations of State or Federal Narcotics laws, provided, however, that any doctor of medicine whose narcotics permit has been revoked or surrendered or the issuance thereof denied may make application for membership when such narcotics permit has been reissued for a year or more at the time of such application."

2. Chapter 1, Section 4, Line 1, delete the title "Good Standing" and insert in lieu thereof the words "Membership Requirements." And redesignate the present Section 4, as Sub-section (a) entitled "Good Standing."

Insert a new Sub-Section (b) to read as follows:

"(b) Removal from Rolls

The membership in the Oklahoma State Medical Association and any component society of any member whose Federal narcotics permit has been revoked or surrendered because of alleged violations of State or Federal narcotics laws shall be automatically terminated, and his name dropped from the membership rolls as of the effective date of such revocation or surrender."

Doctor Ritzhaupt suggested that an amendment be made to the wording, removing the word "alleged" and inserting the word "proved." Doctor Goodwin moved: "That Doctor Ritzhaupt's wording be accepted." Doctor Colvert seconded the motion. The motion carried.

Doctor Weaver moved: "That the first amendment be adopted with the amended wording." Doctor First seconded the motion. The motion carried.

Doctor First moved, "That the second Amendment be adopted with the amended wording. Doctor Weaver seconded the motion. Motion carried.

3. CHAPTER V, Section 5

Line 7, after the words "prior to the" and before the word "of" delete the word "election" and insert in lieu thereof the word "nomination."

Doctor Larrabee moved: "That the amendment be adopted." Doctor Colvert seconded the motion. The motion carried.

4. CHAPTER VII. Section 5, Sub-section (d),

Line 10, delete the last sentence of this Sub-Section.

Doctor First moved, "That the amendment be adopted." Doctor Weaver seconded. The motion carried.

As it was then 8:00 P. M., the time set for the election of officers, the Speaker announced the nomination of John E. McDonald of Tulsa as President-Elect. L. C. McHenry, M.D., moved that Doctor McDonald be elected by acclamation. Motion seconded and Doctor McDonald was unanimously elected.

The Speaker next pointed out that there was only one nomination for each office and asked the pleasure of the house in this regard. J. R. Colvert, M.D., moved that all officers be elected by acclamation. Doctor Weaver seconded, and the following officers were unanimously elected.

Delegate to A. M. A. for 2 years—James Stevenson, M.D., Tulsa

Alternate Delegate to A. M. A.—Ned Burleson, M.D., Prague

Alternate Delegate to A. M. A. for Unexpired term of W. W. Cotton, M.D.—Malcom Phelps, M.D., El Reno.

Speaker of House of Delegates for 2 Years—Clinton Gallaher, M.D., Shawnee

Vice-President for 1 Year—James Petty, M.D., Guthrie
Vice Speaker of House of Delegates—Keiller Haynie, M.D., Durant

Councilors—

District No. 3—Bruce Hinson, M.D., Enid—Councilor
C. M. Hodgson, M.D., Kingfisher, Vice-Councilor

District No. 6—R. Q. Goodwin, M.D., Oklahoma City, Councilor
Allen Gibbs, M.D., Oklahoma City, Vice-Councilor

District No. 9—F. R. First, Jr., M.D., Checotah, Councilor
I. W. Bollinger, M.D., Henryetta, Vice-Councilor

District No. 7—W. T. Mayfield, M.D., Norman, Councilor
Paul Gallaher, Shawnee, Vice-Councilor

District No. 8—Wilkie Hoover, M.D., Tulsa, Councilor

District No. 12—J. H. Veazey, M.D., Ardmore, Councilor
W. T. Gill, M.D., Ada, Vice-Councilor

The next order of business was a report from the Resolutions Committee. Doctor McClure, Chairman of the Committee read the Resolutions, action was taken on each one individually, and the following Resolutions adopted:

RESOLUTION

WHEREAS, John E. McDonald, M.D., of Tulsa, Chairman of the Public Policy Committee of the Association, has given unstintingly of his time at great personal sacrifice during the past year to direct the affairs of the Public Policy Committee, and

WHEREAS, the members of the Public Policy Committee are fully aware and cognizant of these sacrifices and the splendid work done by Doctor McDonald as Chairman,

NOW THEREFORE, BE IT RESOLVED that the Public Policy Committee express to the House of Delegates through the Council its appreciation for the leadership given the Committee by its chairman during the past year.

RESOLUTION

WHEREAS, every practicing member of the medical profession, recogniziug the contribution to the efficiency of his practice which is made by the assistants iu his office, and

WHEREAS, his assistants must be prepared at all times to deal tactfully aud diplomatically with the peculiarities aud complaints of his patieuts and his own foibles, aud

WHEREAS, the work is in every detail streuuous and exacting, and,

WHEREAS, the Medical Assistants Society, composed of this group of well-trained, willing co-workers have organized themselves together for the purposes of improving their own efficiency and their value to the Doctors of Medicine with whom they work.

NOW THEREFORE BE IT RESOLVED, that the Oklahoma State Medical Association express to the Medical Assistance Society its gratitude for their efforts on the doctors' behalf, both individually and as a group.

RESOLUTION

WHEREAS, there is a growiug tendency in the United States today toward interference and regulation in every field of human endeavor, and

WHEREAS, such interference and regulation is the opeuing wedge for the eucroachment of the specialistic system on the present Americau system of freedom of endeavor and enterprise, and

WHEREAS, this tendency is not in any way limited to the iuterests of any particular group, but is being manifested in such widely varied fields as the practice of medicine, housing, power productiou and distribution and eveu agriculture,

NOW THEREFORE, BE IT RESOLVED by the House of Delegates of the Oklahoma State Medical Association at its 59th Annual Meeting in Oklahoma City, Oklahoma, this 18th day of May, 1952, that the Oklahoma State Medical Association hereby denouuces as undemocratic and uu-American, all and auy efforts which will result in the socializatiou of any busiuess, industry, group or professiou, and

BE IT FURTHER RESOLVED, that copies of this Resolution are to be directed to the President of the United States and the members of the Oklahoma Delegation in Congress.

RESOLUTION

WHEREAS, the Auxiliary to the Oklahoma State Medical Association has over the past few years maintaiued an active Auxiliary in the majority of the component county and district societies, and

WHEREAS, the officers and the members of the Auxiliary have giveu generously and tirelessly of their time and talents to support every project of the Oklahoma State Medical Association, and

WHEREAS, the work of the Auxiliary membership in carrying out the plaus of the American Medical Associatiou National Education Campaign has beeu particularly outstanding, and

WHEREAS, the defeat of proposals for compulsory health insurance, which is the aim and objective of the National Education Campaign, will help to wipe out the creeping paralysis of Socialism in this country,

NOW THREFORE, BE IT RESOLVED, that the Oklahoma State Medical Association express to the Woman's Auxiliary its appreciation for its invaluable service in the present critical period, not only to the profession of medicine, but also to all Americans who want their children to receive the same heritage of glorious freedom which was handed to us by our forefathers.

RESOLUTION

WHEREAS, the increase iu the number of medical school studeuts to be admitted yearly has beeu increased to 100, and

WHEREAS, this iucrease will materially aid in over coming the shortage of physiciaus in Oklahoma, and

WHEREAS, the health of the people will be materially benefited in the renderiug of better medical care,

NOW THEREFORE BE IT RESOLVED that the Oklahoma State Medical Association commeud the Oklahoma Legislature, the Board of Higher Regents, and the Regents of the University of Oklahoma for making possible sufficient appropriations to educate the increase in the number of students at the University of Oklahoma.

RESOLUTION

WHEREAS, the Medical Service Society, composed of representatives of pharmaceutical and biological houses, has rendered such a great service to the medical profession of this state, and

WHEREAS, the Medical Service Society is at all times ready and willing to acept its responsibilities in bringing about a better understanding aud cooperation between the medical profession aud the representatives of their companies, and

WHEREAS, the Medical Service Society has made an outstanding contribution, both financially and otherwise, to the Medical Research Fouudation,

NOW THEREFORE, BE IT RESOLVED that the House of Delegates of the Oklahoma State Medical Association commends the Medical Service Society for its outstanding achievements and assures the Medical Service Society of the continued good will of the Oklahoma State Medical Association and with the hope and best wishes for a continued growth and expansion, and

BE IT FURTHER RESOLVED, that a copy of this Resolution be forwarded the Companies whose representatives are members of the Medical Service Society.

RESOLUTION

WHEREAS, an application is presented being processed with the intent of obtaining A.M.A. approval of a Specialty Board in Medical Microbiology which will certify non-physicians as diplomates iu a field of medical practice, and

WHEREAS, there is already in existence an AMERICAN BOARD OF PATHOLOGY, which cau provide certification of properly qualified physicians in the field of Medical Microbiology.

NOW THEREFORE, BE IT RESOLVED that the House of Delegates reaffirm its approval of the essentials for an approved Examining Board iu Medical Specialty, including the principles that applicants for examiuation must be graduates of a Medical School approved by the Council ou Medical Education and Hospitals and must be licensed to practice Medicine, and

BE IT FURTHER RESOLVED that the House of Delegates iustructs the COUNCIL ON MEDICAL EDUCATION AND HOSPITALS TO LIMIT ITS approval of Specialty Boards to those which can comply with these essentials in order to safeguard the interests and welfare of patients.

RESOLUTION

WHEREAS, Venereal disease has become of miuor importance in the State of Oklahoma, and

WHEREAS, ample and adequate private physicians are obtainable in every community in this state to treat, diagnose and care for venereal disease in those able to pay a private physician, and

WHEREAS, the counties of the state are required by law to diagnose and treat those unable to pay a physician, and

WHEREAS, a considerable amount of federal funds are expended unnecessarily for this purpose, duplicity existing in agencies of the counties for the treatment of the indigents.

NOW THEREFORE BE IT RESOLVED, that federal funds for treatment and diagnosis of venereal disease be confined to bonafide indigents, and that treatment be given by the county as required by law, and further, that no federal money be expended in this respect,

AND BE IT FURTHER RESOLVED, that a copy of this Resolution be forwarded to the State Health Commissioner, and

BE IT FURTHER RESOLVED, that the Oklahoma State Medical Association take advisable action relative to this Resolution and any further action it may deem advisable.

RESOLUTION

WHEREAS, the Federal Security Administrator has proposed a system of free hospitalization for the aged and certain depeudent groups, and

WHEREAS, all persons aged sixty-five (65) and over and their dependents who are entitled to social security cash benefits, regardless of whether they are actually receiving the benefits, would be eligible for sixty (60) days of free hospital service in any one year, and

WHEREAS, adoption of such a system would bring about a form of federal subsidy and control of hospitals and socialized hospital care for a large percentage of rapidly increasing agiug population of the United States,

NOW THEREFORE BE IT RESOLVED, that we, the House of Delegates of the Oklahoma State Medical Association, at regular meeting this 18th day of May, 1952, go on record as opposing the plau for free hospitalization, and

BE IT FURTHER RESOLVED, that a copy of this Resolution be made a part of the records of this meeting, and that copies of it be sent to (1) Members of the Congress from the State of Oklahoma (2) Oklahoma County Medical Societies (3) American Medical Association (4) Association of American Physicians and Surgeons (5) American Academy of General Practice (6) Oklahoma State Medical Association, and

BE IT FURTHER RESOLVED, that the Oklahoma State Medical Association take advisable action relative to this Resolutiou and any further actiou it may deem advisable.

RESOLUTION

WHEREAS, the advancement of medical science and knowledge and the consequent increase in the complexity of present day medical care has brought about an unavoidable increase in the costs of medical care, and

WHEREAS, this increased cost, along with present general iuflationary tendencies is a heavy burden upon any person requiring medical and hospital care at a time when he is least able to bear such a burden, and

WHEREAS, voluntary health and medical care plans are available and offer to all the people a means of budgetiug the necessary expenses of such care, and

WHEREAS, these voluntary plans are available without governmental interfereuce and regulation, and

WHEREAS these plans are now being provided at a cost to the individual much lower than would be cost of any type of national compulsory health insurance, and

WHEREAS, these voluntary plans for medical care are growing daily and can readily be expanded to include all persons who could be covered under any government plan,

NOW THEREFORE, BE IT RESOLVED by the House of Delegates of the Oklahoma State Medical Association at its 59th Annual Meetiug iu Oklahoma City, Oklahoma, this 18th day of May, 1952, that the Oklahoma State Medical Association hereby reaffirms its support aud endorsement of every type of voluntary health and medical care coverage available through the commercial iusurance companies, fraternal organizations, the Blue Cross and Blue Shield, or any other voluntary societies.

Following the report of the Resolutions Committee, Doctor Goodwin addressed the House aud made the following motion: "That the chairmen of all the major committees receive the same comments as were afforded John McDonald, M.D., as Chairman of the Public Policy Committee." Motion seconded and carried.

The Speaker then asked for any unfinished business. None was forthcoming.

In concluding the meeting the Speaker complimented and thanked the House for their splendid cooperatiou in making the 1952 meeting of the House of Delegates a success.

There being no further business, the meeting was adjourned at 9:00 P.M.

Reported by Mary O'Leary.

POSTGRADUATE

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3 days, November 10-12

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FREDERIC W. GOODRICH, JR., M.D., Yale University; Authar of "Natural Childbirth—A Manual far Expectant Parents."

JOHN L. PARKS, M.D., Geargе Washingtan University; Prataganist of "Roaming-In."

RALPH A. REIS, M.D., Narthwestern University; Author of "Diabetes and Pregnancy."

EDWARD A. SCHUMANN, M.D., University af Pennsylvania; Farmer President, American Gynecalagic Saciety.

FRANKLIN SNYDER, M.D., Harvard University; Authar af "Obstetric Analgesia and Anesthesia."

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Canadian	C. Riley Strong, El Reno	Jack Myers, El Reno
Carter-Love-Marshall	Malcolm Horne, Ardmore	Ray Graybill, Ardmore
Cherokee	*Not Reported*	
Tri-County (Choctaw-McCurtain-Pushmahata)	*Not Reported*	
Cleveland-McClain	Clarence Mitchell, Norman	Kirk T. Mosley, Norman
Comanche-Cotton	J. N. Mitchell, Lawton	Herbert Howard, Lawton
Creek	P. K. Lewis, Sapulpa	W. N. Hindman, Sapulpa
Custer	Paul B. Lingenfelter, Clinton	Curtis B. Cunningham, Clinton
East Central (Muskogee, Sequoyah, Wagoner, McIntosh)	William Weaver, Muskogee	Charles Fullenwider, Muskogee
Garfield-Kingfisher	E. E. Talley, Enid	Roscoe C. Baker, Enid
Garvin	John A. Graham, Pauls Valley	Hugh H. Monroe, Pauls Valley
Grady	W. W. Davis, Chickasha	Beverly C. Chatham, Chickasha
Grant	I. Y. Hardy, Medford	F. P. Robinson, Pond Creek
Greer	Tom L. Wainwright, Mangum	J. B. Hollis, Mangum
Hughes	*Not Reported*	
Jackson	H. M. Bussey, Altus	E. J. Allgood, Altus
Jefferson	John B. Jacobs, Waurika	W. A. Heflin, Waurika
Kay-Noble	P. A. MacKercher, Ponca City	R. W. Gibson, Ponca City
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LeFlore-Haskell	G. M. Hogaboom, Heavener	Jose R. Rigual, Wister
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Northwestern (Beaver, Harper, Ellis, Dewey, Woodward)	Frank E. Flack, Woodward	M. C. England, Woodward
Okfuskee	L. J. Spickard, Okemah	Charles L. Reynolds, Weleetka
Okmulgee	*Not Reported*	
Oklahoma	Ralph A. Smith	L. C. Taylor, Oklahoma City Mrs. Muriel Waller, Exec. Sec'y.
Osage	W. T. Manning, Pawhuska	Cody Ray, Pawhuska
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Pottawatomie	Clinton Gallahar, Shawnee	W. M. Gallaher, Shawnee
Rogers-Mayes	Minor Gordon, Claremore	W. D. Anderson, Claremore
Seminole	Claude S. Chambers, Seminole	A. N. Deaton, Wewoka
Stephens	W. K. Walker, Marlow	W. R. Cheatwood, Duncan
Texas-Cimarron	*Not Reported*	
Tillman	W. A. Fuqua, Grandfield	O. G. Bacon, Frederick
Tulsa	Marshall O. Hart, Tulsa	Paul T. Strong, Tulsa Jack Spears, Exec. Sec'y.
Washington-Nowata	Cole D. Pittman, Bartlesville	H. E. Denyer, Bartlesville
Woods	O. E. Templin, Alva	William F. LaFon, Alva

THE JOURNAL

of the

OKLAHOMA STATE MEDICAL ASSOCIATION

EDITORIALS

CHRONIC ILLNESS
THE SIXTY-FOUR DOLLAR
CURRENT MEDICAL QUESTION

On June 26 to 27, 1952, Oklahoma presented what is purported to be the first postgraduate course in chronic illness in the United States. The guest speakers were: J. Gordon Barrow, Jr., M.D., Atlanta, Georgia; Thomas P. Murdock, M.D., Meriden, Conn.; David D. Rutstein, M.D., Boston, Mass.; and J. Shirley Sweeney, M.D., Gainesville, Texas.

Some of their discussions are printed in this issue of the Journal. For want of space, much valuable material presented at the sessions and discussions by local participants must be omitted.

Chronic illness from gestation to the grave grows in gravity as longevity gyrates about preventive medicine and the phenomenal progress of therapeutic measures.

Shortly before World War II, the glamorous Mr. McNutt, speaking to a great audience in Oklahoma City, put the glory of the New Deal before the gullible devotees of a dying Democracy. The speaker, a victim of equal gullibility, made the mistake of advocating better medicine in one breath and in the next, admitting that the Federal government was facing two serious problems — "The youth group and the old age group".

Unconscious of the shocking paradox he had posed, he sat down amidst the rousing applause of his fellow gullibles. Later the writer discussed this embarrassing statement with Mr. McNutt's man Friday and had the pleasure of calling attention to the fact that already medicine had been good enough to produce both of these "serious problems" and the government had been too dumb to intelligently ponder the unsuspected paradox.

Medicine is conscious of the $64.00 question posed by chronic illness, including the infirmities of old age; the profession stands ready to help work out the harrassing problems though many of them are extremely difficult and some perhaps insoluble. This readiness should be reinforced by government recognition and cooperation. But instead the medically ignorant, though medically minded, bureaucrats want to take over medicine and assume the responsibility of telling the profession how to accomplish the task while bound hand and foot by the red tape of government heavily gummed with the glue of their ignorance and gullibility.

In the July *Maryland State Medical Journal*, Howard A. Rusk[1] sounds a timely warning and emphasizes the many serious problems connected with chronic illness and increasing longevity. Conscious of medicine's part in the creation of these problems he says:

"Medicine's number one problem is the problem of chronic disease in an aging population, made up of all the results of good medicine, a problem created by liver extract and insulin and x-ray techniques, and vitamins and penicillin, cortisone, ACTH, good x-ray and the type of cardiac surgery you developed here in Baltimore, and everything that has gone into making medical care in America what it is today.

"For that reason, you can readily see what has happened. Two thousand years ago, man's expectancy was twenty-five. At the turn of the century, forty-nine. Last week it was seventy-one years for white women and sixty-five and a half years for white men, in the United States. A white man of sixty-five today, has an expectancy of twelve and four-tenths years and a white woman of almost fourteen and a half years.

"Twenty-five per cent of the population in America in 1940 were beyond the age of forty-five. They required fifty per cent of the medical service. By 1980 almost fifty per cent of the population will be beyond the age of forty-five and they will require eighty per cent of the medical service.

LIBRARY OF THE

THE TWENTY-SECOND CLINICAL SOCIETY

The Clinical Society's menu each year tickles the palate of the medical gourmet. Those of us who have gone year after year since the society's inception remember such dishes as that offered by E. Starr Judd, Elliot Joslin, Lewellys Barker, Isaac Abt, Ernest Sachs, Russell Haden, William Boyd, Tracy Mallory, B. H. Nichols, Walter Alvarez, Frank Leahy, Russell Cecil and many other old timers and wonder whether new ones can be as good. We wondered the same thing when men like Leo Rigler, Claude Dixon, Wiley Forbus, Louis Newburgh, Cyrus Sturgis, Tinsley Harrison, Rudolph Kampmeier, and Carl Moyer were to be the guest speakers and even the most discriminating were delightfully surprised. Many of these men who were young and relatively unknown when they visited us now have famous names in medicine. Let's see what has happened in the case of a few: Carl Moyer has succeded Evarts Graham in the chair of surgery at Washington University. Tinsley Harrison's book on internal medicine is as good as the best in print today. Leo Rigler is one of the top men in roentgenology in the world today. Waldo Nelson's book on pediatrics, along with Clifford Grulee's are the ones the pediatricians depend on almost exclusively.

The background of the Oklahoma City Clinical Society is the background of American Clinical Medicine. This year with one exception the Clinical Society offers a bunch of new dishes. I am a little anxious to see what they are like. There is John Bartram in pediatrics who hails from Nelson's place in Philadelphia where a hotel bears his name or vice-versa. James Dickson, in orthopedics, from the Cleveland Clinic from which we have had Haden, Ernestene, Nichols, and many others, R. H. Flocks, in urology, and John Randall in obstetrics, came from Iowa, which, though not big, has sent us P. C. Jeans, E. D. Plass and Arthur Steindler. Francis Lederer in otolaryngology, comes from the University of Illinois and also William Riker, in surgery. Henry Poncher and John Youmans were also from there. While we have had men from Texas before, Mengert, Harrison, Moyer, Carlisle, Singleton and Carrell, Oklahoma City's attitude toward a neighbor state and rival is best illustrated this year when three of the Lone State products have been asked to come. Edwin Rippy of Southwestern, in medicine, Roscoe Pullen in medicine, from the University of Texas Post Graduate School at Houston, Clarence Livingood in dermatology, from the University at Galveston.

In the 22 years of operation there has always been someone from the Mayo Clinic —this year is no exception and we welcome Newton Smith in proctology and Howard Gray in surgery. I trust there will be another clinical pathological conference. This year the pathologist fiend of Satan is John Schenken of Nebraska. Perhaps the greatest advance in surgery particularly in thoracic surgery has been not is surgery itself but in anesthesiology and it is with real anticipation that we wait for Rolland Whitacre of Cleveland. Philadelphia sends another one, new to us, from Jefferson, Lewis Scheffey in gynecology. One wouldn't think so but some of our best speakers have been in the highly specialized field of radiology. This field is represented by Harvey White of Northwestern. All the old time members and associate members welcome back Joe Vander Veer in medicine from the University of Pennsylvania. We always like to hear what is going on at the A.M.A. and this year we will eat high on the hog with George Lull the Secretary-Manager.

THE VOTE

It's time for physicians to decide how to vote and to urge other people to vote against the leftwingers who are taxing and spending us into socialism.

As a rule there is a fine relationship between country people and their physicians, particularly between the farmer and his doctor. Today the farmers control at least 20 per cent of the nation's votes. Each member of the State Association owes it to his patrons, to his profession and his country to use every opportunity to drive home the danger of socialism and to influence the vote against the entrenched powers now planning to police us.

Scientific Articles

CARDIOVASCULAR DISEASE AS A NATIONAL HEALTH PROBLEM*

T. P. MURDOCK, M.D.

MERIDEN, CONNECTICUT

I think you have selected wisely for this session limiting the discussion to Diabetes Mellitus, Cancer and Heart Disease. Of these three, probably the greatest destroyer, in numbers at least, is heart disease. This disease has prominence in early and late life, and in altogether too great frequency.

One of the very sad pictures in medicine is to see the child with congenital heart disease. Another is to see the child with rheumatic fever followed by rheumatic heart disease. It is hard when one can visualize the future for these children with either of these conditions.

It is probably impossible to determine the number of children born with congenital heart disease. It is known that of 5000 registrants in World War II who were re-examined because of the question of heart disease that 4.5 per cent were found to have congenital heart disease. The disease is probably more widespread than has been thought in the past. It is also accepted now that a mother developing rubella in the first trimester of pregnancy will deliver a sizeable percentage of children with congenital defects, including congenital heart disease. The same is true, but to a lesser degree, in the second trimester of pregnancy.

Rheumatic heart disease is the commonest form of heart disease occurring in childhood and young adult life. About 50 per cent of rheumatic heart disease occurs before 30 years of age.

And so at this point we can stop for a moment and say that two of the greatest destroyers of childhood and young adult life are congenital disease and rheumatic heart disease. Here then must our research studies begin toward the end of prevention. This must be done if these young people are to be saved from early long duration illness and if they are to be made useful members of society.

Another step along the way which adds to the number of people with chronic heart disease, and one which is directly attached to rheumatic heart disease and congenital heart disease is subacute bacterial endocarditis.

I think it is a fair estimate that 90 to 95 per cent of these cases are due to non-hemolytic streptococcus — streptococcus viridans. Gram negative bacilli and gonococci probably represent the remaining five to 10 per cent. These organisms are superimposed on an already damaged endocardium.

This disease of itself is a disease of long duration and comes under the heading of chronic heart disease. Not infrequently the disease will last from several months to a year or more.

Prior to the advent of the antibiotics practically all of these people died of their disease. A few cases probably of doubtful diagnosis have been reported as cured.

Unfortunately the feeling persists that it is unwise to make this diagnosis until a positive blood culture has been obtained. Various estimates have been made as to the ease or difficulty of obtaining a positive blood culture. This varies from 25 per cent to 90 per cent. If we take the lower limit, we are denying a large number of these people the possibility of cure.

Given a patient with a history of rheumatic heart disease or congenital heart disease, unexplained fever, petechiae, heart murmur, palpable spleen, leucocytosis and rapid sedimentation rate with or without positive blood culture, I think it is sound to make a diagnosis of subacute bacterial endocarditis.

*Presented at the Postgraduate Course in Chronic Il'ness at the University of Oklahoma School of Medicine June 27, 1952.

In the early days of the use of the antibiotics it was common practice and probably still is in some clinics to give one of the anticoagulants in conjunction with penicillin. I don't think this is any longer necessary.

Where a positive blood culture can be obtained sensitivity tests can be made and the value of the antibiotics determined. Where this is not possible, trial and error must be used.

It is now accepted that when the diagnosis is made reasonably early that a large percentage can be cured of this disease. And this is where we again are faced with a sad situation. We have cured the patient of his subacute bacterial endocarditis—but where does this leave him. He already has his damaged heart from rheumatic heart disease plus the damage from his superimposed subacute bacterial endocarditis. He now, of course, is worse off than he was before he developed subacute bacterial endocarditis. He now has full blown chronic heart disease and faces another period of long duration illness. Frankly the answer to this long series of illnesses rests only in the prevention of rheumatic heart disease and congenital heart disease.

We now leave this sad situation with the hope that soon will come the answer of prevention, and move on to the later decades of life where due to stress and strain again we face the condition of chronic vascular disease and heart disease.

A great many years ago, Herrick in his description of vascular disease stated that one could draw a triangle and on one side write heart disease — on another vascular disease — on the last kidney disease. He stated that you could stand the triangle on any base and the other diseases would follow. I don't think that there is any doubt but that opinion holds today. Later on, Winteritz labelled these under the heading of vascular diseases.

The question of essential hypertension comes next. Those who have had an opportunity to see a great many people with hypertension now feel that there is a definite hereditary factor. When this condition is found, a careful family history will frequently bring out this fact.

There are those who feel that in almost every instance a primary cause can be found. The work of Page and his co-workers have brought out the question of renin and angiotonin as pressor factors. Goldblatt has produced renal ischemia and hypertension by clamping the renal artery.

We must never overlook the strains and stresses of our modern life as causes of hypertension. Again those who have had the opportunity to observe many of these people before and without hypertension and have seen them after tensions or stresses can date the hypertension from that time.

The fact remains, however, that whatever the causes may be, hypertension eventually produced changes in the heart, blood vessels and kidneys.

The next step of course in this picture is the question of arteriosclerosis. It is accepted that it not infrequently follows hypertension. Much attention is being given at this time to the study of cholesterol in its relation to atherosclerosis. That it is a contributory factor, there seems little doubt—but that it is the whole factor there is probably grave doubt.

Despite the fact that this does not come within my province today, I am emboldened to say that the diabetic seldom gets into difficulty with his diabetes as such—but does get into serious difficulty with the complication of atherosclerosis or arteriosclerosis.

These two factors of hypertension and arteriosclerosis are responsible for 25 to 40 per cent of chronic heart disease and arteriosclerotic heart disease is one of the commonest causes of death.

The symptoms and signs of arteriosclerotic heart disease are those of angina pectoris—with chest pain particularly on effort —shortness of breath—disorders of conduction mechanism—and later the other manifestations of congestive heart failure.

A word should be said here about coronary thrombosis and its relationship to chronic heart disease. There are those who now advise the term myocardial infarction. It is my feeling that it will be hard to displace the term coronary thrombosis.

The symptoms and signs are well known with sudden onset of crushing substernal pain—frequently with radiation to shoulder or neck — rapid and frequently irregular heart — shock — elevation of temperature with increased leucocytes and rapid sedimentation rate.

About 80 per cent of these people survive the first attack—but death occurs with succeeding attacks or from congestive heart failure and many within five years. A few are able to return to their previous occupations—but many become chronic heart invalids.

These various people with hypertension, arteriosclerotic and coronary heart disease eventually develop congestive heart failure and become subjects of chronic heart disease with which we are particularly interested today.

Congestive heart failure means breathlessness—weakness—edema—abdominal discomfort—palpitation and precordial distress. In a word, they are subjects of a serious chronic disabling disease. The management and care of these unfortunate people is one of the very important and challenging situations placed before American medicine today.

The burden on the heart must be lessened. It is frequently necessary to restrict the activities of these people to a marked degree. Almost always it is necessary that they be relieved of any work activities. In the beginning this is frequently difficult because of the economic picture. They should be kept at home as long as possible. Then if necessary in a general hospital and finally if necessary in a home for cardiac invalids.

The heart muscle efficiently should be improved with digitalis. I think it is probably wise with older people in congestive heart failure to slowly digitalize them. Later, of course, maintenance digitalis is required Edema should be relieved with salt restriction and the judicious use of the mercurial diuretics. Sedatives, hypnotics and opiates are of great help in these people. They are usually apprehensive and fearful and sleep must be induced.

And so here today we are faced with a discussion of one of the many and, perhaps the most frequent and important of the chronic illnesses. It is one of the serious challenges facing American Medicine.

All men must die once, and it is only natural that an organ so important as the heart should be attacked as the result of the wear and tear processes of life.

We have the right here to ask can this problem ever be completely erased? My own feeling is that it cannot. At the same time, I feel that we can postpone this even if we feel that it is eventually inevitable.

My thought is that research should be directed toward removing stresses and strains—toward postponement of arteriosclerosis—toward the prevention of rheumatic heart disease and congenital heart disease.

When and if these diseases develop, to see to it that these people are give adequate —scientific—kindly care at home—in a general hospital or an infirmary type of home for the care of cardiac patients. Until we have done this, we will not have done our full duty to mankind.

MEET OUR CONTRIBUTORS

This month's contributors were instructors at the Chronic Illness Seminar held at the University of Oklahoma School of Medicine June 26 and 27 and sponsored by the Oklahoma State Department of Health, and the Office of Postgraduate Instruction at the University of Oklahoma School of Medicine in cooperation with the Oklahoma State Medical Association, Oklahoma State Heart Association, Oklahoma Chapter, American Cancer Society and Oklahoma Diabetic Detection Committee.

Speakers whose papers appear in this issue are:

J. Gordon Barrow, Jr., M.D., Atlanta, Georgia, internist, who wrote "The Cardiac Control Program in Georgia;"

J. Shirley Sweeney, M.D., medical director, the Sweeney Diabetic Foundation, Gainesville, Texas, author of "The Sweeney Diabetic Foundation Camp for Diabetic Children;"

Thomas P. Murdock, M.D., Meriden, Conn. trustee of the American Medical Association and member of the Commission on Chronic Illness, author of "Cardiovascular Diseases, a National Health Problem;" and

Kirk T. Mosley, M.D., Oklahoma State Health Department, who wrote "A Survey of the Changing Health Problems". Doctor Mosley was graduated from Hendrix College and Tulane School of Medicine and served as a medical missionary for several years. He is professor of epidemiology at the present time.

THE SWEENEY DIABETIC FOUNDATION CAMP FOR DIABETIC CHILDREN*

J. SHIRLEY SWEENEY, M.D., F.A.C.P.

GAINESVILLE, TEXAS

No champagne bottle was broken. Just the strings of an apron were cut. The cutting of the apron strings was symbolic of releasing a diabetic child from its parental vigil and indulgence. Thus in June of 1950 Camp Sweeney was dedicated. Dr. Edward L. Bortz of Philadelphia, past President of the American Medical Association was our main speaker.

The idea of this camp was conceived 22 years ago. A 12 year old girl was brought to the writer. Her mother had contacted several summer camps seeking admission for her daughter. I tried several more but none would consider accepting her because she had to have insulin three times daily, her diet had to be figured accurately and so on. Frankly, the camp operators were afraid to have her as a camper.

The thought of a full summer camp for diabetic children became a dream about which I talked to many people. One day a group of interested business men of Gainesville came to Dallas to see me. They assured me that if I would only come to Gainesville, 70 miles north of Dallas, they would make my dream a reality. After the war these business men were still enthusiastic about the project. In the fall of 1947 I moved to this little City of about 12,000 souls. In October of 1949 there were ground breaking ceremonies. During the summers of 1950-51 several hundred children enjoyed camp life for the first time in their lives. We attempted to teach these children independence and self-reliance. We have succeeded.

Camp Sweeney is owned and operated by the Sweeney Diabetic Foundation. The Foundation is incorporated under the Laws of the State of Texas as a non-profit organization. The Treasury Department in Washington has authorized and allows donations to the Foundation as deductible expense from tax returns. The Foundation operates on a national basis. It is not restricted to the State of Texas.

In addition to the summer camp for diabetic children other projects are in the making. These are research laboratories for the study of various allied metabolic problems; a medical pavilion where any type of metabolic disorder or disease may be sent for study and treatment, and lastly an educational program to provide both the laity and medical profession new information regarding metabolic problems in general. All of these activities have and can only be made possible by funds acquired by voluntary donations.

Our camp has processed approximately 300 children. It is the only camp to my knowledge that operates throughout the summer — three semesters of one month each. It is hoped that during the Fall, Winter and Spring that adult diabetics may come and enjoy the facilities of the camp area such as horseback riding, fishing, hunting, boating, games etc. Likewise we have had requests from mothers who have small children that they might come and stay for a time for instruction, training and vacation.

Camp Sweeney is located on 403 acres of wooded, rolling hills nine miles northeast of Gainesville. This land is owned by the Foundation and there is a 25-acre spring fed lake, scientifically stocked with fish, facing the main lodge. In addition to the spacious lodge there are four barracks, each with showers, toilets, infirmary room and drug treatment rooms. Each of the barracks houses 24 children. There are two for girls and two for boys. The lodge and barracks are built of California redwood and the Foundation owns these physical properties as well as two dozen riding horses and all of the various sports equipment including

*Presented at the Postgraduate Course in Chronic Illness at the University of Oklahoma School of Medicine June 27, 1952.

boats and outboard motors. The Camp has been so designed that additional barracks may be built. The Camp is primarily for children who live in the 16 Southern States. However, no child has ever been turned down because of the geographic location of his home.

Our campers this summer came from Colorado, Kansas, Arkansas, Louisiana, New Mexico, Oklahoma, Mississippi, Tennessee, and from all parts of Texas. Already we have applications from Florida, Alabama, Kentucky, California, Pennsylvania, Canada and Alaska as well as several foreign countries, in addition to the States above. Eighty per cent of our campers in 1951 either paid nothing or a token tuition of a few dollars. The remainder paid the regular camp fee. No child has ever been denied admission to our camp because of inability to pay. No child knows who does or does not pay. Some of the children stay four weeks, some stay two months and several were here for the entire summer. The ages range from six to 18.

A highly trained staff of medical men and women, registered nurses, dietitians and counselors, all of whom are university graduates and teachers, look after the welfare of the campers. Many of our staff are diabetics. My services as Medical Director are given without remuneration. I receive no stipend from the Foundation.

At Camp Sweeney, while all of the recreational activities, including all of the crafts and sports are available, there is a successful effort made to teach the children the history of diabetes and the mechanics of the disorder. Treatment and the various insulins are discussed and all of the children learn to give their own insulin and test their own urines. All of the older ones are taught to figure their own diets. In short we try to create within each camper a desire to be a good diabetic and we give them an understanding and philosophy of diabetes that make them independent and unafraid. We strip them of all self consciousness and inferiority complexes they might have and try to return them to their parents, proud and chesty youngsters.

A SURVEY OR THE CHANGING HEALTH PROBLEMS*

KIRK T. MOSLEY, M.D.
OKLAHOMA CITY, OKLAHOMA

Physicians who have graduated in recent years finished their formal medical education without seeing a case of smallpox or malaria and only an occasional case of typhoid fever and diphtheria. The infectious disease hospitals, the so-called pest houses of previous decades, are rapidly disappearing from the medical scene. The high summer peaks of deaths from diarrhea and enteritis for infants and children under two years, which characterized this condition in past years, have nearly vanished in all except a few areas. It is obvious that the clinical entities and health problems facing the medical profession today are very different from those of only a few decades ago. It is equally obvious that medical problems have not disappeared; they are, however, changing in many respects. Much of this change in the nature of medical problems is the result of progress in the medical sciences and the quality of medical care.

In order to be more specific in discussing the changing health and medical problems a brief review will be made of the mortality records of those diseases and conditions which are largely responsible for the changing character of medical practice.

Tuberculosis, the leading cause of death in 1900, with a rate of approximately 200/100,000 has steadily declined to a rate of less than 30. This disease is slipping out of that select group known as the 10 leading causes of death and in several states this has already happened. Typhoid and paratyphoid fever ranked high as a cause of death in 1900 with a rate of approximately 30/100,000. This rate is now less than one. Many of the older practitioners remember when their practice was nearly disrupted by typhoid fever cases in the fall of

*This category of conditions is now carried in the international list of causes of death under the heading of gastritis, duodenitis, enteritis and colitis. Age group is not specified probably because the differential by age groups is so small that is it not considered of sufficient importance for separate listing.

each year. Many physicians, who have graduated less than 10 years ago, are still waiting to encounter their first case of the disease. The rate of diphtheria of over 40/100,000 was even higher than that for typhoid fever in 1900. However, the decline of diphtheria has been even more rapid than typhoid fever so that the present rate is also less than one.

The rate of disappearance of malaria in the United States has been remarkable and in recent years, the United States Public Health Service has been able to verify the indisputable indigenous origin of only a few cases. Malaria is so scarce in Oklahoma that the State Health Department is offering $5.00 for every case of indigenous malaria proven by a positive blood smear.[1] As yet, the first payment is to be made. Not so many years ago, malaria was so highly endemic with cycles of epidemic years that the disease was considered one of the hopeless medical problems effecting a large part of the south. In epidemic years this scourge was among the leading causes of death in several of the southern states.

The heavy loss of life of infants and children under the age of two from diarrhea and enteritis* was at the rate of 115/100,000 at the beginning of the century. Deaths from this cause were especially common during the summer months. Both the death rate and morbidity rate have declined steadily, with the present death rate now less than 7/100,000. Research has shown the specific etiologic agents responsible for many of the clinical conditions previously carried in this category and methods of treatment and prevention has sharply lowered the deaths from these causes.

The graph, shown in Chart I, portrays the nearly steady decline of the death rates from 1900 to 1950 of a group of conditions which may be classified as acute infectious entities. It is of interest to note that this rather small group which includes tuberculosis, typhoid and paratyphoid fever, diphtheria, diarrhea and enteritis in infants and children under two, and malaria accounted for nearly one death out of every four in 1900 while today they account for less than one death out of 25 and nearly all of these are due to tuberculosis. While these favorable changes were occurring for this particular group of conditions and also for many others including pneumonia, scarlet fever, whooping cough, measles, dysentery and nearly all of the other acute infectious diseases, health problems of an entirley dfferent nature were becoming relatively more important. The diseases which have gradually, but steadily replaced the acute communicable diseases as major causes of death are headed by the triad of heart disease, cancer and cerebral hemorrhage. The graph, in Chart I shows that in 1900, two of these conditions, heart diseases and cancer were responsible for only one death in eight. Today these two are credited with well over one half of all the lives lost each year. In this connection, it must be remembered that a large part of the increase in death rates from degenerative and neoplastic diseases is accounted for by the increased average life expectancy. More people are living to an age when degenerative and neoplastic conditions have their highest incidence. Much of the increase of the life expectancy has resulted from the prevention of deaths formerly claimed by infectious diseases and other causes of high losses of infant lives. The reciprocal relationship between declining death rates of infectious diseases and the lengthening of the span of life is graphically illustrated in Chart II. It should not be concluded from this illustration that the lengthening of life is accounted for entirely by the decline in the death rates of only those diseases (tuberculosis, typhoid and paratyphoid fever, diphtheria, diarrhea and enteritis and

TABLE I

LEADING CAUSES OF DEATH IN OKLAHOMA, 1920 AND 1950

1920		1950	
Causes	No. of Deaths	Causes	No. of deaths
Pneumonia	1,582	Heart diseases	6,056
*Acute communicable diseases	1,481	Cancer	2,682
Influenza	1,363	Cerebral hemorrhage	2,246
Tuberculosis	1,128	Accidents	1,350
Congenital Malformations	1,013	Congenital Malformations and diseases of infancy	1,155
Cerebral hemorrhage	948	Pneumonia	600
Heart disease	755	Tuberculosis	500
Diarrhea and enteritis under 2 years	695	Nephritis	445
Nephritis	682	Diabetes	308
Cancer	617	Influenza	214
Maternal deaths	313	Suicides	193
Appendicitis	210	Intestinal Obstructions and hernia	147

*INCLUDES: Typhoid fever, malaria, smallpox, measles, scarlet fever, whooping cough, diphtheria, dysentery, tetanus, poliomyelitis and rabies.

SOURCE: PUBLIC HEALTH STATISTICS, PART II BIRTHS AND DEATHS, OKLAHOMA STATE DEUARTMENT OF HEALTH, 1950, AND UNPUBLISHED DATA FROM THE FILES OF THE DEPARTMENT.

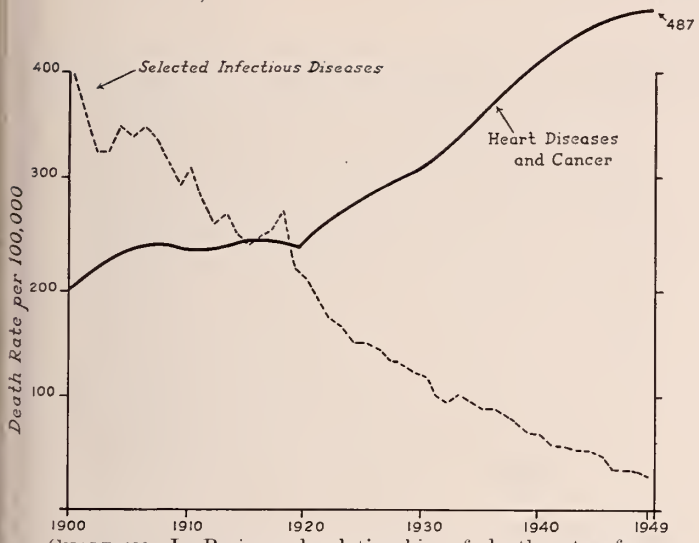


CHART NO. I—Reciprocal relationship of death rates from selected causes (typhoid and paratyphoid fever, diphtheria, malaria, diarrhea and enteritis under age 2, and tuberculosis) and the aveage life expectancy at birth.
SOURCE: Vital statistics of the United States, Bureau of Census Annual Publication, 1900-1949.

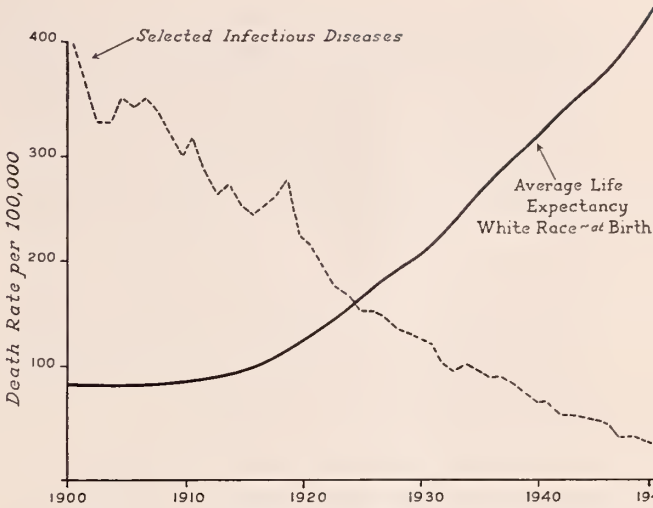


CHART NO. II—Comparison of death rates of selected infectious diseases (typhoid and paratyphoid fever, diphtheria, malaria, diarrhea and enteritis under age 2, and tuberculosis) and death rates from selected chronic diseases (heart diseases and cancer)
SOURCE: Vital statistics of the United States, Bureau of Census Annual Publication, 1900-1949.

malaria), listed in the chart, however, the lowered death rates of this group have contributed a great deal to the present life expectancy.

While most of the statistical material used in the above discussion has been derived from data taken from the mortality statistics of the United States, the same general trend of death rates holds true for Oklahoma. This is well demonstrated in Table I which shows the 12 leading causes of death in Oklahoma in 1920 and a corresponding list for 1950. Under the heading of acute communicable diseases which ranked second in the list in 1920 are included, diphtheria, with 402 deaths; typhoid fever with 362 death; whooping cough, with 315 deaths; dysentery, with 121 deaths; malaria, with 106 deaths; measles, with 84 deaths; scarlet fever, with 29 deaths; tetanus and poliomyelitis each 23 deaths; smallpox with 13 deaths and three from rabies. The total deaths from these causes was 1,481 in 1920. The number of deaths from this same group in 1950 was only 82. It may be surprising to some that maternal mortality was included among the first 12 causes of death in 1920. At that time the rate was 7.7. This rate has declined to a figure of 0.9 which may be compared with an estimated national rate of 0.7. It is of interest to note that the four leading causes of death in 1920, as shown in the table, fall in the category of infectious diseases. Not any of this group is found among the first four causes of death in 1950. They gave way to heart disease, cancer, cerebral hemorrhage and accidents. This change in the relative importance in the causes of mortality and morbidity is not just simply a matter of statistical interest and significance. It lies at the center of many of the problems being encountered by the medical profession today.

The practice of medicine is not focused to the same extent as it has been in the past upon the treatment of acute illness. Many of these diseases are now preventable and most of the others are self limited in duration. The younger age groups have profited most from preventive measures and to that extent may expect to receive a relative smaller proportion of medical care services. On the other hand, there is much evidence that the older age groups will be making an increasing demand upon the physician's time and greater use of medical care facilities. The chief reasons for this are: (1) the population is aging; the number as well well as the per cent of people in the older age groups is steadily increasing, and (2) the long-term sickness often referred to as a chronic illness or disease is much more frequent in the older age groups, especially in those groups 40 years of age and over.

To illustrate the significance of these changes to the practice of medicine, reference will be made to a study[2] dealing with chronic illness in the population over 65. According to this study, it is estimated that the number of cases of cardiovascular renal diseases in the population over 65 may reach 3.8 million by 1975, as compared with an

estimated 1.5 million cases in 1935. If the rate of physician house calls for medical care for this type of illness remains the same in 1975 as in 1935, the grand total may reach 18.7 million house calls as compared with an estimated 7.3 million in 1935. Also on the basis of the experience in 1935, it is estimated that 25,000 hospital beds will be required for this specific group of patients alone. If these estimations are close to the truth, it is apparent that an increasing proportion of medical care including all the ancillary services will be devoted to patients with chronic diseases.

The natural history of many chronic diseases have certain features which may be expected to have an influence on the type and nature of medical practice. Many of these diseases are characterized by an onset so insidious that the patient may have no presenting sign or symptom until the disease has reached an advanced stage. Accordingly, the detection of the disease in its early stage will often depend upon the careful and thorough evaluation by the physician of apparently well patients and those with only "so-called" trivial complaints. Many studies are being made to devise means whereby the incipient stage of the more common chronic diseases can be detected by simple, reliable and inexpensive procedures on a mass scale. These programs often referred to as multiphasic clinics or mass screening clinics are still undergoing careful study and evaluation. Certain procedures for the early discovery of some of the more common chronic conditions are well established such as the serologic test for syphilis and the mass x-ray examination for tuberculosis. However, tests for the early detection of heart disease and cancer, suitable for mass screening purposes, have yet to be devised. The most efficient and effective screening clinic, operating for mass production, is not designed to replace or equal the evaluation of the individual's health status by the private physician. However, when properly managed and supervised, screening clinics of some type may be of great assistance to the medical profession in providing a service to the community.

Many of the diseases in the older age groups are characterized by a chronic course which may be interrupted with periods of remissions and exacerbations. Under such circumstances, medical supervision must be considered in terms of months or years. This aspect of chronic illness has a direct bearing on the teaching program for medical students. In many instances, courses of instruction including clinical teaching provide only a cross sectional perspective about a disease state. The longitudinal perspective in which the natural history of the disease is followed by means of medical supervision of a patient over a period of months or years is often difficult to indoctrinate into the student. It is Pullen's[3] belief that the physician in active practice attending the aged is confronted with sociologic and economic problems which are covered inadequately, if at all, by the average undergraduate medical curriculum. This problem is being approached by a research project recently undertaken by the University Hospitals, the University of Oklahoma Medical School and the Oklahoma State Health Department. In this project, the various aspects of comprehensive medical care of patients with a chronic illness are to be studied and used in clinical instruction of medical students. An integral part of this program includes continuous medical supervision of patients during the entire course of illness, both while in the hospital and when at home.

The increase in patients with chronic disease may be expected to stimulate the development and utilization of many ancillary and related medical facilities and services other than the medical care rendered by the patient's physician. Facilities such as nursing homes, convalescent homes and hospitals, rehabilitiation centers, will assume increasing importance. Services such as those rendered by visiting nurses associations, and voluntary health organizations are proving to be very helpful in meeting some of the problems created by chronic diseases. While such services and facilities enter into the medical picture, the actual medical supervision of the patient remains the paramount duty of the physician. It becomes necessary for the medical profession and the individual practitioners to be cognizant of services and facilities available in the community and how they may be obtained and utilized by eligible patients. For example, this issue of the Journal carries an announcement of a new service for cardiac patients which is being provided through the cooperative efforts of the Oklahoma branch of the American Heart Association, the University Hospitals and the University of Oklahoma Medical School and the Oklahoma State Health Department.

The medical problems which have been presented by the aging population with their high prevalence of chronic diseases are calling forth a veritable mass of research and studies which are approaching these problems from every conceivable aspect. In an effort to bring together many of disciplines and resources which will be needed to help solve these problems, a Commission on Chronic Illness was founded in 1949 under the sponsorship of the American Medical Association, the American Hospital Association, the American Public Health Association and the American Public Welfare Association. Because of the growing importance of problems directly related to chronic diseases, the individual physician has a responsibility of acquainting himself with the medical aspects of these problems and keeping himself informed about the socio-economic factors involved with the aging of the population and their influence on the practice of medicine.

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THE CARDIAC CONTROL PROGRAM IN GEORGIA*

J. GORDON BARROW, JR., M.D.

ATLANTA, GEORGIA

The need for a well developed clinic program in Georgia has been apparent to those working in the field of heart disease for some time. Prior to the spring of 1949 the only two clinics treating heart disease in Georgia were at the medical schools, one in Augusta and one in Atlanta, and these were merely a part of the outpatient department of the hospital and had no home care or follow-up service, insufficient staff and no public health objectives.

When federal funds became available for the development of a cardiac program in Georgia, it was decided that the first step would be to develop two strong regional clinics, one at each medical school, so that these could act as consultation centers for the remainder of the clinics when they were established. Nurses, secretaries, social workers, and certain badly needed equipment were furnished to these two clinics. Since that time there have gradually been opened over the state 11 more cardiac clinics to serve the smaller communities. These have almost invariably been under the sponsorship of the local health department with the local physicians most interested in heart disease giving their time and services to the clinic free of charge. The clinics have been developed as a co-operative effort between the Georgia Heart Association, the state and local public health services and the local hospital and welfare agencies. It is felt that a co-operative effort is always more productive than a single agency trying to take the full responsibility.

The purpose of these clinics is three fold:

1. The care of indigent cases of heart disease or potential heart disease in the community.

2. The education of nurses, medical students and doctors to better recognize and care for heart disease.

3. Research into the problems of heart disease care.

A detailed description of the Atlanta clinic, one of the regional clinics, might be well at this time. This Atlanta clinic has a half time Cardiologist as medical director, a full time clinic nurse, five nurses trained in public health work to do home visiting and follow-up, two full time, well trained medical social workers and two secretaries. In addition there is a full time fellow in cardiology furnished by the Georgia Heart Association and several of the residents in the hospital rotate through the clinic. Medical care and teaching in the clinic is given by 12 leading cardiologists in Atlanta who do-

*Presented at the Postgraduate Course in Chronic Illness at the University of Oklahoma School of Medicine June 27, 1952.

LIBRARY OF THE

nate their time free of charge. There are five clinics held weekly, the adult clinic for new patients, the adult clinic for old patients, pediatric cardiac clinic, hypertensive clinic and a screening clinic whereby all school children found to have heart murmur, all patients picked up on TB X-rays who have enlarged hearts and all other cases found with a question of heart disease can be screened to see whether or not further study in the Cardiac Clinic or by their private physician is desirable. The equipment of the clinic consists of 10 examining rooms, a fluoroscope, EKG machine, blood pressure apparatus and apparatus for doing sedimentation rates. Routine laboratory and X-ray facilities are available in the hospital. The records are dictated by the doctors on a Dictaphone and the nurses receive a copy of his notes each time so that proper follow-up may be accomplished. The criteria for diagnosis and classification of the American Heart Association are followed in the clinic.

As an adjunct to the clinic, the home nursing service, which has previously been mentioned, has been found extremely important, both for follow-up and for treatment purposes as well as prevention of future illnesses. The medical social workers have also proved very important and make home visits when necessary.

The Vocational Rehabilitation Office of the state co-operates closely with us in the rehabilitation of patients. The nutritionist of the hospital as well as the State Health Department nutritionist also co-operates with us in planning diets for patients. The local Crippled Children's Division of the State Health Department has been most helpful in co-operating in the convalescent care and treatment of congenital and rheumatic heart disease, and other agencies of the community are called upon for services from time to time.

It may be asked at this time what public health functions the clinics are serving. I think they can be summarized in three main groups:

1. Prevention of heart disease. We can now actively prevent rheumatic fever and subacute bacterial endocarditis in known susceptible persons by proper prophylactic techniques, and by proper treatment we can prevent the progression of the disease in many patients.

2. Case findings and screening. In this category we have found the evaluation of murmurs in school children to be of great importance.

3. Reduction of local hospital load since patients are taught to take better care of themselves at home and the rehabilitation of many who would otherwise be disabled and on relief.

We consider that the statewide cardiac program has been very worthwhile and believe that its addition to a state public health program would be a real step in the right direction.

FALL CLINICAL CONFERENCE SLATED FOR OCTOBER

An outstanding program is planned for the 22nd Annual Clinical Conference of the Oklahoma City Clinical Society to be held October 27, 28, 29, 30, 1952 at the Biltmore Hotel, Oklahoma City.

Complete list of 17 guest speakers appears elsewhere in the Journal.

General assemblies, postgraduate panel discussions, roundtable luncheons, clinic dinner and the annual smoker will comprise the program as in the past. Roundtable luncheons will be held each day at noon.

HAVE YOU HEARD?

A. Ray Wiley, M.D., Tulsa, and Miss Catherine Louise Davis, formerly of Denver, Colo. were married recently.

Leroy Engles, M.D., has been named Bryan County Health Director.

Morris Smith, M.D., Guymon, attended the Grand American Trap Shoot at Vandalia, Ohio.

Thelma Varian, Wagoner, showed slides taken on her recent Canadian trip at the Wagoner Rotary Club.

Homer F. Marsh, formerly associate dean and professor of bacteriology at the University of Oklahoma School of Medicine for 11 years, is now asseiate dean of the new University of Miami Medical School, Miami, Florida.

Ralph E. Payne, M.D., Edmond, recently attended the postgraduate course at the Cook County Graduate School of Medicine.

Lewis J. Moorman, M.D., Oklahoma City, editor of the Journal, and Mrs. Moorman will attend the World Medical Association meeting and World Medical Editors Association in Athens, Greece, this month while on a Mediterranean cruise.

Roger Reid, M.D., Ardmore, related his experiences while serving as a colonel with the 45th division in Japan at a meeting of the Ardmore Rotary Club.

J. E. Tompkins, M.D., Yukon, was recently honored with a community "Appreciation Day."

Col. Everett G. King, formerly of Duncan, is now commanding officer of the army hospital at Nurnberg, Germany.

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RESEARCH IN THE SERVICE OF MEDICINE

President's Page

One of the most penetrating and painful parental remarks that I can remember is "If you dance, you must pay the fiddler."

This homely bit of wisdom was dispensed most frequently on Monday morning, when after a weed-end of revelry, it was obvious that I was neither physically nor spiritually able to attack with vigor the arduous duties of a farm hand.

It seems that physicians of Oklahoma are also becoming acutely aware of this inexorable law. By this time many of you have seen your Blue Cross and Blue Shield dues go up and what is worse the dues of the patient have been raised in some counties.

We all agreed, by implication at least, to admit patients on Blue Cross only for bona fide illness and to keep them there as few days as was reasonable—and in general to follow the spirit as well as the letter of the contract.

Not all the abuses have been committed by doctors, of course. Some onery people put the pressure on us and use their Blue Cross as a convenience or even luxury.

There is no way *yet* to get something for nothing nor can you get blood out of a turnip.

When the money paid out exceeds the money paid in, the dues must be raised or the plan folds up. Simple as that.

Anyway, we are now paying the fiddler and his fee will be even higher unless we honestly and seriously undertake to make the plan work. An average of a single day less in the hospital for each patient would take us out of the red.

Think it over.

Alfred R. Snuggs

President

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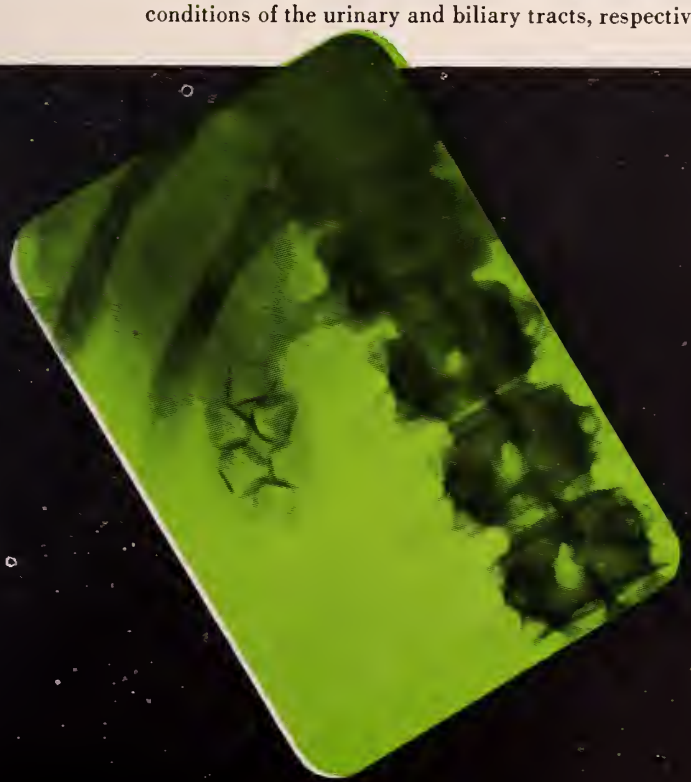
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OBITUARIES

PAUL H. CRAWFORD, M.D.
1882-1952

Paul H. Crawford, M.D., pioneer Oklahoma City physician, died suddenly at his home July 31.

Born in Taylorstown, Pa. August 22, 1882, he came to Oklahoma City in 1909. At the time of his death he was Oklahoma county physician and a member of the Oklahoma sanity board and was physician for the Oklahoma Boxing Commission for 15 years.

He was a graduate of Lafayette College, Easton, Pa., and received his medical degree in 1907 from the University of Pittsburgh.

In addition to his medical activities, he was a Mason, a member of the Indian Temple Shrine, Delta Kappa Epsilon social fraternity, and Pi Rho Sigma medical fraternity. He was a member of the First Presbyterian church.

Survivors are the widow of the home, one daughter and a grandson.

JAMES F. McMURRY, M.D.
1902-1952

James F. McMurry, M.D., well known Sentinel physician, died August after several months illness, a victim of leukemia.

Doctor McMurry, who was 49 at the time of his death, was co-founder of the McMurry-Stowers hospital in Sentinel and had practiced in that community since 1934. He was a graduate of Trinity college, Waxahachie, Texas, and of Vanderbilt Medical School, Nashville, Tennessee. He served a year's internship at Nashville and another year at St. Francis Hospital in New York City. Following his internship, he took two years of surgical residency training at St. Luke's Hospital in New York.

Elected to Honorary Membership in the O.S.M.A. at this year's House of Delegates, he was formerly president and secretary of the Kiowa-Washita County Medical Society, a former member of the State Board of Medical Examiners, the executive committee and board of directors of the Oklahoma Division of the American Cancer Society and was one of the first physicians to participate in the preceptor program at the University of Oklahoma School of Medicine.

He was a member of the Methodist church and the Masonic lodge and was an active member of the Sentinel School Board. He was an honorary member and past president of the Sentinel Rotary Club.

Survivors include the widow, Mrs. Anna Jo McMurry, a former president of the Woman's Auxiliary of the O.S.M.A. and three sons, James Finley Jr., 12; John Carden 8; and William Lee, 3.

E. T. KEELER, M.D.
1881-1952

E. T. Keeler, M.D., pioneer Lamont physician, died July 28 after a long illness.

Doctor Keeler, who was graduated from Northwestern University School of Medicine, was born at Belmont, Iowa, September 6, 1881 and began the practice of medicine at Lamont in 1913.

Survivors include his widow of the home, two sons, one granddaughter and three grandsons.

THOMAS P. ALLISON, M.D.
1870-1952

Thomas P. Allison, M.D., Sand Springs, died August 1 in a Tulsa hospital following a long illness.

Doctor Allison, who was born at Johnsville, Arkansas November 15, 1870, had practiced in Sand Springs 33 years. He was graduated from the College of Physicians and Surgeons in St. Louis in 1889 and practiced at Tahlequah before going to Sand Springs.

He was a member of the Odd Fellows and Woodmen of the World lodges.

Survivors include the widow of the home and one brother, John S. Allison, M.D., Tahlequah.

KENNETH D. JENNINGS, M.D.
1896-1952

K. D. Jennings, M.D., Chelsea, died August 2 in a Tulsa hospital of Cancer.

Doctor Jennings had practiced in Chelsea for 27 years and owned and operated his own hospital there. He was a member of the Chelsea school board and served as president 18 years, retiring last April.

He was an elder of the First Presbyterian church, a veteran of World War I and a member of the Lions club, Chamber of Commerce and American Legion.

Born at Marlow, he took pre-medical courses at the old Henry Kendall college, now the University of Tulsa. He was graduated from the University of Oklahoma School of Medicine in 1924.

Surviving are his widow of the home, one son, grandchild, three brothers and two sisters.

B. H. MOORE, M.D.
1889-1952

B. H. Moore, M.D., Oklahoma City physician since 1924, died September 30, 1952 after an illness of six months.

Born in Johnson County, Texas, Doctor Moore began his practice in Durant in 1919 after graduation from the medical school in Cincinnati, Ohio. In addition to his medical activities, he was a member of Olivet Baptist church, a 32nd Degree Mason and a lifetime member of the Shrine.

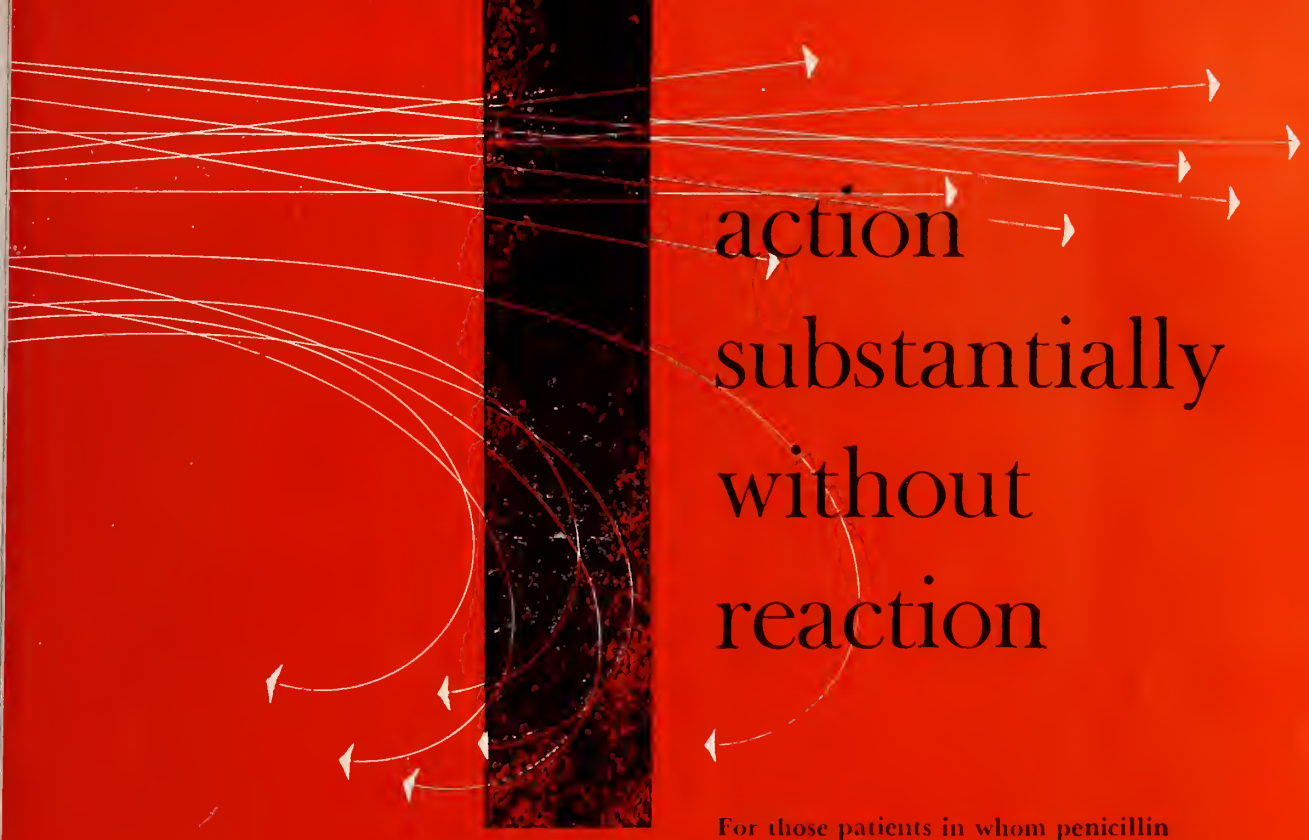
Survivors include the widow of the home, three daughters, three sons, a step-son, nine brothers, 10 grandchildren and one great-grandchild.

GEORGE FULTON, M.D.
1881-1952

George Fulton, M.D., Okalhoma City, died July 1 after being ill for almost a month.

Doctor Fulton had practiced in Oklahoma City since 1909. He was born in Cedar Glades, Arkansas January 16, 1881 and began his medical studies at Barnes Medical School, St. Louis, Mo. He completed his medical training at Memphis Medical college, Memphis, Tenn. and after practicing in Hot Springs, Ark. for a short time, came to Oklahoma City.

Survivors include the widow of the home, two daughters, two brothers and three grandchildren.



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COUNTY OFFICERS TO HAVE MEETING OCTOBER 26

In order that county medical societies may have a closer relationship with the committees of the Association and the general program of the Association, there will be a meeting of all officers of county medical societies in Oklahoma City October 26.

Although the program is not yet complete, it is contemplated that the procedure will be principally a panel discussion of the activities of the Association as outlined by its various committees.

In addition to county officers, all members of the Association who would like to attend are cordially invited.

1953 ANNUAL MEETING TO BE HELD APRIL 13-14-15

The Annual Meeting Committee of the Association has approved the recommendations of the Convention Committee of the Tulsa County Medical Society that the 1953 Annual Meeting of the Association be held April 13-14-15 with the House of Delegates convening as usual on the Sunday preceding the meeting.

The 1953 Annual Meeting will be held in the Cimarron Ballroom which is located just two blocks from the Mayo Hotel and is readily accessible to the hotel facilities. The 1953 meeting will follow the same general outline as the 1952 meeting insofar as there will be only one general scientific session.

PRIORITY III PHYSICIANS BEING SCREENED FOR AVAILABILITY

The Oklahoma Volunteer Advisory Committee for Physicians, Dentists and Veterinarians is in the process of surveying the availability for military service of all Priority III physicians. This is in line with Selective Service directives to all state volunteer advisory committees.

According to Col. Clive E. Murray, Director of Selective Service for Oklahoma, there are 262 Priority III physicians in the State.

Priority III physicians, when found available for military service, will be placed in 1A and subsequently ordered by Selective Service to report for physical examination. Priority III physicians should understand that the call for a physical examination is not a call for induction.

The Oklahoma Volunteer Advisory Committee is receiving many inquiries as to the possibility of Priority III physicians being called to duty but the Committee is not in a position at this time to give a reasonable answer to this inquiry. It is hoped that by the first of the year more definite information will be made available, according to F. Redding Hood, M. D., chairman of the Committee.

DIABETES DETECTION DRIVE

During the week of November 16-22, physicians are asked to cooperate in the Diabetes Detection Drive. Sixteen county medical societies in the state have formed committees on diabetes to carry out detection activities this fall and it is hoped that additional county societies will participate. Hugh Jeter, M.D., 1200 North Walker, Oklahoma City, is a member of the American Diabetes Association Committee on Detection and Education.

HERE'S A GOOD IDEA!

Because the deadline for the Journal is one month previous to its publication, it is impossible to state conclusively that the following will take place.

The Executive Office, however, is in posession of information that at least one of the larger county medical societies will put to a vote of its members at its September meeting the question as to whether or not doctors' offices will be closed the afternoon of election.

At least this thought might well be copied by all county medical societies!

S. M. A. AUXILIARY INVITES WIVES TO MIAMI

Complete social program for the ladies will be included in the agenda for the Southern Medical Association meeting in Miami, Florida, November 10-13, 1952.

Tentative Auxiliary program is as follows:

Sunday, Nov. 9—Special Executive Committee meetings

Monday, Nov. 10—Luncheon for Past Presidents
Luncheon for Councilors

Tuesday, Nov. 11—Executive Board Breakfast
General Sessions
Doctor's Day Luncheon
Other social activities, including a fish fry on the beach.

Wednesday, Nov. 12—General Sessions
Luncheon honoring the President, Mrs. V. Eugene Holcombe; the President-Elect, Mrs. Richard F. Stover and visiting State Presidents and Charter Members.

Thursday, Nov. 13—Executive Board banquet.

Mrs. Ralph B. Eusden, President of the A.M.A. Auxiliary, will discuss aims and general program of the Auxiliary and Mrs. John McCuskey, a vice chairman of the A.M.A. Auxiliary, will speak on nurse recruitment.

Officers from Oklahoma are Mrs. Ray M. Balycat, Oklahoma City; and Mrs. Herbert Orr, Tulsa, Councilor and Vice-Councilor; Mrs. Joseph Kelso and Mrs. W. K. West, both of Oklahoma City, are members of the Executive Board.

STATE DIABETIC GROUP TO MEET IN OKLA. CITY

Although the exact time and place will be announced later, there will be a meeting during the Fall Oklahoma City Clinical Society meeting of physicians interested in the Oklahoma State Diabetic Association.

During the O.S.M.A. meeting in Oklahoma City in May, an Oklahoma State Diabetic Association was organized with about 25 attending. The organization will become an affiliate organization of the American Diabetes Association and plans are underway to proceed with the organization as they have in many communities in various sections of the U. S.

For further information, please contact Earl Mulmed, M.D., Medical Arts Building, Tulsa Oklahoma.

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Proc. Staff Meet. Mayo Clin. 26: 361, Sept. 26, 1951.

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HEALTH OF SCHOOL CHILDREN DISCUSSED AT CONFERENCE

The Second Annual Conference on the Health of the School Age Child was held in Norman October 3 and 4. This Conference, as it was last year, was held in conjunction with the annnal meeting of the Oklahoma State Association of School Health Administrators.

W. W. Baner, M.D., Director of the A. M. A. Bnreau of Health Education was gnest speaker at the lnncheon on Saturday, October 4. Other out of state speakers were M. J. Pescor, M.D., medical consnltant on mental health of the U. S. Pnblic Health Service regional office in Dallas; and Thomas E. Shaffer, M.D., practicing pediatrician of Philadelphia, Pa. and a member of the teaching staff at St. Christopher's Hospital for Children, Philadelphia. Alfred R. Sugg, M.D., President of the O.S.M.A. addressed the group on Friday morning.

Sponsored jointly by the Oklahoma Association of School Administrators, the Oklahoma State Medical Association, State Health Department and the Oklahoma Advisory Health Conncil, each county medical society was nrged to send representatives to the conference.

PRESIDENT OF A. M. A. VISITS OKLAHOMA

Louis H. Baner, M.D., President of the American Medical Association, was the principal speaker at the dedication of the new wing of Hillcrest Hospital, Tnlsa, on September 21.

Due to the fact that announcement of Doctor Bauer's trip to Oklahoma was not announced nntil Augnst 14, some six weeks after the calling of the Council meeting on the same date, not as many officers of the Association fonnd it possible to be present as wonld have liked to be.

UNIVERSITY HOSPITAL CARDIAC CLINIC

University Hospital has recently inaugnrated a new cardiac clinic to provide special facilities and services to cardiac patients with diagnostic and therapentic problems who are eligible for admission to the University Hospital and outpatient department. The clinic meets from 1:00-3:00 P.M. on Tuesday and Thursday of each week.

Admissions to the clinic will be on limited basis and will be primarily reserved for cases referred to it by physicians desiring consultative assistance on patients with cardiac problems.

It is the purpose of the clinic to make a complete evaluation of the patient and promptly report the findings to the referring physicians with recommendations for therapy and management.

Physicians who wish to have their patients admitted to this clinic may do so by writing to Mrs. Doris Snyder, Secretary, Cardiac Clinic. University Hositals, Oklahoma City, Oklahoma. Telephone nnmber, Regent 6-1511, extension 200. An appointment will be made for the patient with instructions giving the date and honr and place to report for this special service.

The cardiac clinic is receiving support and assistance from the Oklahoma Heart Association and the State Health Department. With its growth and development of the clinic, it is expected to meet the criteria established by the American Heart Association for cardiac clinics.

PRESIDENT SUGG APPOINTS CHAIRMEN OF COMMITTEES

Chairmen of the Standing Committees of the Association for the coming year have been announced by Alfred R. Sngg, M.D., President.

Heading up the committees are R. Q. Goodwin, M.D., Oklahoma City, Pnblic Policy; R. M. Wadsworth, M.D., Tulsa, Pnblic Health; Milam F. McKinney, M.D., Oklahoma City, Military Affairs; Gifford H. Henry, M.D., Tulsa, Civilian Defense; Harry A. Daniels, M.D., Oklahoma City, Postgraduate Education; and L. Chester McHenry, M.D., Oklahoma City, Organizational Functions.

The additional appointments to these committees will be on the basis of Councilor Districts with the exception of the Pnblic Health Committee whose members serve on a Congressional District basis.

It is hoped that the entire membership of these committees can be published in the next issue of the Journal.

COUNCIL MEETS AT LAKE TEXOMA

The first fall meeting of the Council was held at Bnrns Run Lodge Lake Texoma September 20 and 21.

In addition to the members of the Council and Officers of the Association, the following were invited to attend:

President, secretary and execntive secretary of the state pharmacentical, dental, press, hospital and farm bnrean organizations; president, secretary and execntive secretary of the Arkansas State Medical Association; Oklahoma Commissioner of Health; president, secretary and executive director of Blue Cross and Blue Shield, Medical Board of Examiners and attorney, Dean of the University of Oklahoma School of Medicine and Director of Ont-Patients and Admissions; President of the University of Oklahoma and chairman of the Board of Regents; Chairmen of the Standing Committees of the Oklahoma State Medical Association; and representatives of the Execntive Office of the Association.

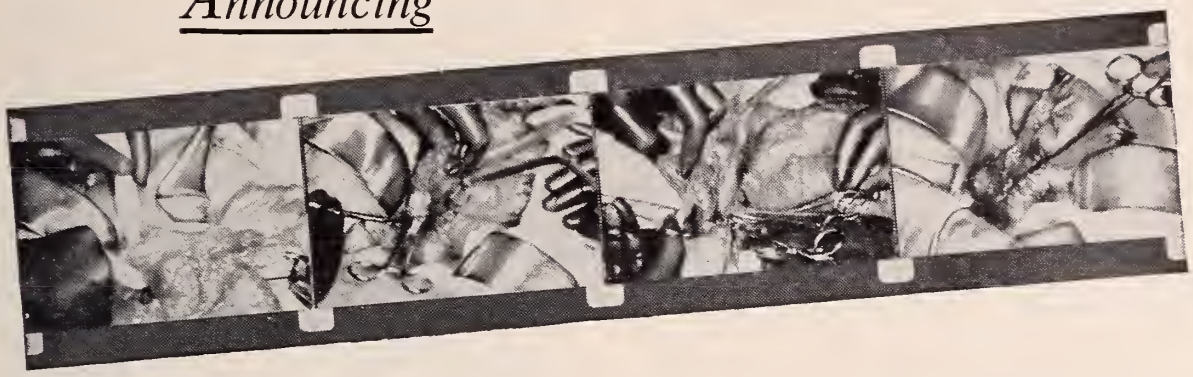
The meeting of the Council, in addition to being a business session, was in the form a general get together of other organizations and public agencies having an interest in the health fields. A tour of Lake Texoma on an excursion boat was part of the entertainment planned for the members of the Council and guests who attended.

RELEASED FROM SERVICE

The following Oklahoma physicians have recently been released from the Armed Forces:

Capt. Robert B. Bolene, Enid; Lt. Bill J. Reynolds, Norman; (both Air Force); Maj. Mark Royal Johnson, Tnlsa; Lt. Col. Roger James Reid, Ardmore; Maj. George Ross, Enid; Capt. Robert Shore, Lawton (Army); Lt. M. K. Braly, Buffalo; Lt. Howard S. Browne, Jr., Ponca City; Lt. Donald F. Robinson, Norman; Lt. John S. Dnnn, Tulsa; Lt. Charles E. Hamilton, Altns; Lt. (JG) Ben A. Goodwin, Oklahoma City; Lt. Ralph N. Ownby, Jr., Durant; Lt. William C. Click, Dnrant; Lt. John D. Kennedy, Bartlesville; Lt. Randall M. Kersten, Oklahoma City; and Lt. David R. Brown, Ardmore (all Navy).

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CURRENT ACTIVITIES AT THE OKLAHOMA MEDICAL RESEARCH FOUNDATION

EDWARD C. REIFENSTEIN, JR., M.D.
DIRECTOR



This is the eleventh in a series of monthly articles concerning the current activities of the Oklahoma Medical Research Foundation. In this number we will discuss the program in the field of psychosomatic medicine and psychiatry, under the direction of Dr. Stewart Wolf, Consultant Member of the scientific staff of the Foundation and Head of the Section on Psychosomatic Medicine.

Doctor Wolf is known to the physicians of Oklahoma as Professor and Head of the Department of Medicine of the University of Oklahoma School of Medicine, and as Physician-in-Chief of the University Hospital, Oklahoma City (see Figure 1). He came to Oklahoma to assume this position on April 15, 1952 (see *J. Okla. State Med. Assoc. 45:224*, June, 1952). Because of his unusual qualifications and interests in the field of research in psychosomatic mechanisms, Doctor Wolf has been made a member of the scientific staff of the Oklahoma Medical Research Institute and Hospital in order to enable him to develop a Section on Psychosomatic Medicine with a broad plan of investigation which integrates all of the pertinent facilities in the State.

In the Section on Psychosomatic Medicine, Doctor Wolf will have associated with him Dr. Robert A. Schneider, Associate Member of the scientific staff of the Foundation (see Figure 1). Doctor Schneider was born in Minneapolis, and received four degrees, B.A., B.S., and M.B., and M.D., from the University of Minnesota. He had hospital training in medicine and psychiatry at the University of Minnesota, The New York Hospital-Cornell Medical Center (with Dr. Harold G. Wolf), and the Maudsley Hospital, London, England (with Professor Aubrey Lewis and Dr. John Lovett Doust). He came to Oklahoma from England on July 1, 1952 to accept an appointment in the School of Medicine as Assistant Professor of Medicine. Doctor Schneider has done research in the fields of psychosomatic mechanisms, particularly the relations of life stress and emotions to blood clotting in man and the physiology of awareness with reference to oxygen saturation of the tissues; he has published 13 scientific papers.



FIGURE 2. Research Foundation Sanatarium of the Oklahoma Medical Research Foundation.

The Section on Psychosomatic Medicine has initiated a program of investigation which will utilize the facilities of the Research Foundation Sanitarium, the Research Institute, and the Research Hospital of the Oklahoma Medical Research Foundation, the Neuropsychiatric Wards of the University Hospital, and some, or even all, of the six institutions of the Department of Mental Health of the State of Oklahoma.

The initial phase has been started in the Research Foundation Sanitarium. This unit for the treatment of nervous and mental disorders is located at Northeast 23rd Street and Spencer Road (see Figure 2), and was established in 1939 by Dr. Coyne H. Campbell, well-known psychiatrist of Oklahoma City, and Professor of Psychiatry of the School of Medicine, (see

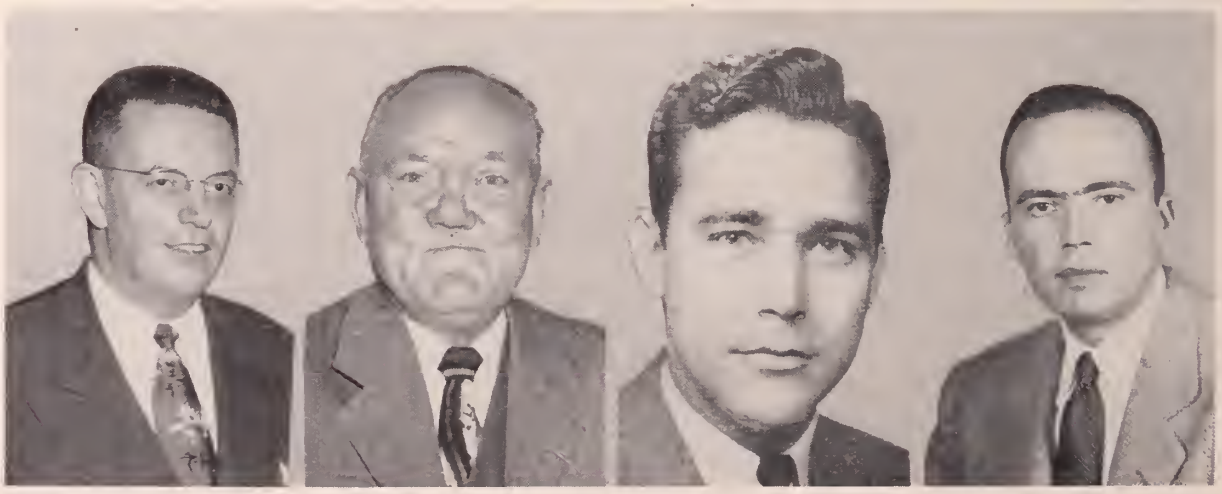


FIGURE 1. Personnel of the Oklahoma Medical Research Foundation concerned with the Program of Research in Psychosomatic Medicine. Left to Right: Dr. Edward C. Reifenstein, Jr., Director of Research for the Foundation; Dr. Coyne H. Campbell, Medical Superintendent of the Research Foundation Sanitarium; Dr. Stewart Wolf, Head of the Section on Psychosomatic Medicine and Consultant Member of the scientific staff; and Dr. Robert A. Schneider, Member of the Section on Psychosomatic Medicine and Associate Member of the scientific staff.

Figure 1). On March 1, 1950, Doctor Campbell gave the Sanitarium to the Oklahoma Medical Research Foundation, a most generous gesture which has made possible the development of the broad program of research in mental conditions and disorders. Doctor Campbell at the request of the Foundation continues to direct the patient care in the Research Foundation Sanitarium. Under his supervision, the most modern facilities have been developed for diagnosis and treatment. The Sanitarium, with two main buildings, three cottages, and two staff dwellings, provides facilities for 80 patients. The Foundation has encouraged Doctor Campbell in his efforts to provide facilities for the most recent medical advances, and at present is completing the installation of equipment so that the entire Sanitarium will be air-conditioned. Doctor Campbell is assisted in the patient-care program by Dr. Harold G. Sleeper, and Dr. Muriel Hyroop, Staff Physicians; Judith Fullen, Occupational Therapist; Forest Stith, Social Worker; Jack Barthold, Business Manager, and other personnel which total over 25 individuals. Doctor Campbell has an active private practice in psychiatry.

Although the research in the Section on Psychosomatic Medicine is the responsibility of the Director of Research of the Foundation (see Figure 1) and through him, of Dr. Wolf, the Head of the Section, the entire investigative program involving the Sanitarium is being developed in close cooperation with Doctor Campbell. Research facilities have been arranged in the Sanitarium for Doctor Schneider. The investigation concerns the development and testing of a new therapeutic procedure. This technic, tried with apparent success in preliminary studies on psychotic and severely pschoneurotic patients at the Maudsley Hospital, London, England, by Dr. Schneider in collaboration with Dr. Lovett Doust, is a type of physical treatment, which is completely harmless and much less strenuous than electric shock insulin subcoma therapy.

A further evaluation of this new technic is being undertaken at several of the hospitals of the State of Oklahoma Department of Mental Health in cooperation with Dr. Charles F. Obermann, Medical Director. This is another phase of the program of the Section on Psychosomatic Medicine of the Oklahoma Medical Research Foundation. Since there are nearly 10,000 patients in the mental institutions of the State, a large number of individuals in each diagnostic category can be tested and the final value of the new therapy can be determined in a relatively short period of time.

Other research is under way also in the Section on Psychosomatic Medicine. Dr. Coyne H. Campbell, in addition to his other activities, is the principal investigator in a research project himself. This is an ingenious study designed to test experimentally some of the aspects of psychoanalytic theory.

Doctor Wolf has worked for over ten years on various aspects of gastric function, including the relationship of life stress and emotion to gastric function in general, and a detailed inquiry into physiologic and biochemical mechanisms in gastric function, particularly the pain mechanisms in the stomach and the chemical constituents of gastric juices. As a continuation of these interests, Doctor Wolf has in progress as another phase of the program of the Section, an experimental study of the relationship of life stress to gastric mucus substances in man. This study is supported by a grant of $6,000 from the Research and Development Board of the United States Army, and the work is being done in the Research Institute building in a laboratory assigned to Doctor Wolf for his Section. The study involves the analysis of the constituents of gastric mucus by the most modern chemical technics in an effort to discover what factors govern the production of the various components and to find out what these factors have to do with the protection of the gastroduodenal

(Continued on Page 367)



46th Annual Meeting
SOUTHERN MEDICAL ASSOCIATION
Miami, November 10-13

A most cordial welcome awaits physicians of the South attending the Miami meeting of the Southern Medical Association. The meeting will consist of forty-nine half-day sessions presented by the twenty-one sections of the Association, which embrace every phase of medical practice. In addition to the section sessions there will be a general session, the annual dinner of the Association and outstanding scientific and technical exhibits.

This meeting will be the opportunity of the year for physicians of the South to attend a complete general medical meeting and at the same time enjoy a much-needed vacation during one of the most delightful periods of the year in beautiful Miami.

All activities of this meeting will be in the Municipal Auditorium in Bayfront Park and in near-by hotels, everything within walking distance. Good hotel accommodations are available for all who wish to attend this outstanding medical meeting.

Regardless of what any physician may be interested in, regardless of how general or how limited his interest, there will be at Miami a program to challenge that interest and make it worthwhile for him to attend.

Members of state and county medical societies may attend. Eligible physicians, members of state and county medical societies in the South can be and should be members of the Southern Medical Association. The annual dues of $10.00 include the Southern Medical Journal, a journal most valuable to physicians of the South, one that each should have on his reading table.

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Migraine In Children

"Migraine may appear during the first years of life. The presence of subjective signs, such as headache and flimmer scotoma, is often difficult to determine in young children. The true nature of the symptoms frequently remains obscure for years."

Vahlquist, B. and Hackzell, G.: Acta Paediatrica *38*: 622 (1949).

NO. OF CASES	SEX	AGE AT ONSET	CYCLIC VOMITING	DURATION OF ATTACK	INTENSITY
31	8 ♀ 23 ♂	3 yrs. (mean)	3 out of 31	2½ hrs.	severe in all cases

TABLE CONT'D

NO. OF CASES	UNILATERAL HEADACHE	NAUSEA	FLIMMER SCOTOMA	VERTIGO	HEREDITY
31	18 out of 31	31 out of 31	12 out of 31	6 out of 31	20 out of 31

(reference given above)

In a study of 400 adult migraine patients, it was revealed that 34% had suffered attacks before the age of 15.* These investigators concluded that childhood migraine was a much greater clinical problem than was previously believed and that psychodynamic mechanisms played an important part in the disease.

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For children within the age range 7 to 12 years—Cafergot® is administered, one tablet when the attack appears imminent followed by one additional tablet within 30 minutes. Not more than two Cafergot tablets should be administered to children within this age range.

In the adolescent age group, 12 to 18 years of age, the dosage may gradually be increased as necessary up to the usual adult dose, i.e., two tablets when the attack appears imminent followed by one tablet doses at half hour intervals until the attack is aborted. *(Total maximum dose for adults: six tablets for each attack.)*

*Katz, J., Friedman, A.P., and Gisolfi, A.: New York State J. Med. *50*: 2269 (Oct.) 1950.

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BOOK REVIEWS

CORRELATIVE CARDIOLOGY: An Integration of Cardiac Function and the Management of Cardiac Disease. Carl F. Shaffer, M.D., F.A.C.P., Don W. Chapman, M.D., W. B. Saunders Company, Philadelphia and London, 1952.

The use of the outline form throughout the book limits its value, in the opinion of the reviewer, for "the student of cardiology," for whom the manual was prepared. No discussion of controversial points or development of difficult or complicated concepts is possible. The outline form limits, too, the correlation possible between the pathology, physiology, symptoms, physical signs and treatment of the various forms of heart disease. The correlative aspects of this manual could well receive more extensive treatment.

Diagrams are used almost exclusively. There are a few photographic reproductions of chest roentgenograms; they are small and of moderately good quality. The difficulty inherent in translating diagrammatic electrocardiograms into clinical ECG interpretation is well known.

The text suffers generally from a lack of careful proofreading. Several of the diagrams indicating the sites of murmurs in congenital heart disease are mislabeled, as in the diagrammatic representation of the phases of the cardiac cycle.

No specific references are made in the outline to the bibliography, but a reference list is provided at the end of each chapter.

The complete cardiac spectrum is covered, from embryology to collagen disease and trauma. Of necessity, therefore, treatment of each subject is brief. The greatest potential of this work lies in the framework it provides, around which a course in cardiology might be organized.—Robert H. Furman, M.D.

TOXEMIAS OF PREGNANCY: William J. Diekmann, M.D., Professor of Obstetrics and Gynecology, University of Chicago; Chief of Services of Chicago Lying-In Hospital and Dispensary. Second edition. Cloth $14.50. Pp. 710, with 85 illustrations and 1 color plate. C. V. Mosby Company, 3207 Washington Blvd., St. Louis 3, 1952.

The author of this book is one of the world's leaders in the study of the toxemias of pregnancy. In the preface to the first edition of the monograph Doctor Diekmann states that it "was written with two objects in mind, (1) To acquaint the obstetrician with some of the recent contributions on physiology pertaining to obstetrics, (2) To acquaint the investigator untrained in obstetrics with some of the physiology and pathology of obstetrics." In the second edition preface he says that he "had hoped that by the time this edition was prepared the cause of eclampsia would be known." He points out that the war shut off most recent research in this field and that although there are many reports since 1940 the number of new facts is disappointingly small. He suggests the concerted study of research problems by a number of investigators in different localities, several taking the same problem but pooling all results for analysis and study.

The book is divided into six major sections. The first section deals with the history, classification, incidence and pathology of the toxemias of pregnancy. Here Doctor Diekmann emphasizes the importance of careful study before making a diagnosis and that the term

"toxemia of pregnancy" should be restricted to pre-eclampsia and eclampsia which are identical except that in the latter condition coma/and/or convulsions occur. The second section is devoted entirely to the physiology of pregnancy, normal and abnormal. The third section is a complete review of the available knowledge of the etiology of eclampsia. In the fourth and fifth sections Doctor Diekmann discusses the clinical aspects and the treatment of the toxemias. The practitioner of obstetrics will find these two sections most useful. The chapter on pharmacodynamics covers every agent that has had a fair trial in the treatment of these conditions from ether and chloroform to cortisone and intravenous procaine. The methods of administration, advantages, disadvantages and dangers are fully described. The chapters on the obstetric treatment of eclampsia and the non-convulsive toxemias are complete in presenting the useful present day methods of this treatment. In the last section is presented a discussion of the maternal and fetal prognosis and prenatal care. The last two pages contain a list of monographs on eclampsia, maternal and fetal mortality, prenatal care, kidney hypertension, chemistry and physiology. This list will be invaluable to students of the toxemias.

Doctor Diekmann should be congratulated for exceeding his objectives as set out in the preface. He has in addition provided a practical digest of the means of managing these important obstetrical complications which will be of great value to anyone doing obstetrics.

—John W. Records, M.D.

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FOR SALE: Portable G. E. x-ray, complete with developing tank, film holders, viewing box, fluoroscope, lead apron, darkroom light and timer. Perfect condition. Half price. Write Key P, care of the Journal.

FOR SALE: Complete new x-ray and equipment alone or with complete office equipment. N. E. Ruhl, M.D., 1438 N. E. 23rd, Oklahoma City, Okla.

FOR SALE: Late model Dictaphone complete with transcriber. A-1 condition. Write Key W, care of the Journal.

Current Activities at the OKLAHOMA MEDICAL RESEARCH FOUNDATION

(Continued from Page 365)

mucosa against injury and erosion from acid gastric juice. Doctor Wolf will have a research assistant participating in the laboratory phase of this project.

The citizens of Oklahoma can be proud of the fact that through the efforts of the Oklahoma Medical Research Foundation, there is in operation cooperative research on the problems of nervous and mental disorders based on a plan which includes a comprehensive integration of all the facilities of the State such as has never been approached elsewhere.

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ANNOUNCEMENTS

PREMATURE INFANT postgraduate course. Charity Hospital of Louisiana. The Premature Infant Center, 1532 Tulane Avenue, New Orleans 12, La., November 5-19, 1952. No registration fee.

INTERNATIONAL POSTGRADUATE MEDICAL ASSEMBLY OF SOUTHWEST TEXAS Annual Meeting January 27, 28, 29, 1953, San Antonio, Texas, Municipal Auditorium. For further information write the Association at P.O. Box 2445, San Antonio, Texas.

AMERICAN GOITER ASSOCIATION announces the Van Meter Prize Award of $300.00 and two honorable mentions for the best essays submitted concerning original work on problems related to the thyroid gland. Essays covering either clinical or research investigations not exceeding 3000 words, typewritten, double spaced with one carbon copy should be sent to the Corresponding Secretary, George C. Shivers, M.D., 100 East Saint Vrain St., Colorado Springs, Colo. not later than Feb. 15, 1953.

ARTHRITIS AND RHEUMATISM FOUNDATION announces research fellowships in the basic sciences related to arthritis. Deadline for applications is November 1, 1952. For information and application forms address the medical director, Arthritis and Rheumatism Foundation, 23 West 45th. St., New York 36, N.Y.

AMERICAN DERMATOLOGICAL ASSOCIATION, INC. announces annual prize essay contest. Manuscripts in triplicate should be submitted not later than Jan. 1, 1953 to Dr. Louis A. Brunstin, Secretary, American Dermatological Association, 102-110 Second Ave., S.W., Rochester, Minnesota. Further information may also be obtained from the Secretary. Next annual meeting of the Association will be held June 9-13 ,1953, at the Lake Placid Club, Essex County, N.Y.

AMERICAN UROLOGICAL ASSOCIATION offers an annual award of $1000.00 for essays on the result of some clinical or laboratory research in urology. First prize essay will appear on the program of the group to be held at the Hotel Jefferson, St. Louis, Mo., May 11-14, 1953. For full information write the Executive Secretary, William P. Didusch, 1120 North Charles St., Baltimore, Maryland.

THE JOURNAL

of the

OKLAHOMA STATE MEDICAL ASSOCIATION

EDITORIALS

THIS FOR OSCAR EWING

In the July 26 *British Medical Journal* A. N. Exton-Smith[1] reported a survey with accumulated additional data with reference to home conditions, home care and hospital care of the aged sick. After a long discussion with much documented evidence he closes with this conclusion:

"Home is the proper place for the aged: it is there that their roots are deeply implanted; and in the home are to be found their place in the family. All these valuable assets vanish if an old person is uprooted and enters hospital, where, after a prolonged stay, a decline in his faculties may take place."

1. "An Investigation of the Aged Sick in Their Homes, A Survey of 215 Patients in the Borough of St. Pancras." A .N. Exton-Smith, M.D., M.R.C.P. British Medical Journal (July 26) 1952. Page 182.

POLITICAL EDITORIALS

As indicated in recent issues of the Journal, the Editorial Board welcomes reader opinion of editorial policies and practices. In the past, much space has been devoted to political issues involving medical interests. This course has been pursued with the hope that members of the State Association might be informed and alerted as to what is going on in the political world and that they might be prompted to employ their powerful commuity, state and national influence in behalf of the citizenry from whose rightful control the government is rapidly passing into the hands of the bureaucrats.

In justification of the Editorial Board's policies, this brief discussion of the historical background may interest those who read the Journal. In *Paideia, the Ideals of Greek Culture,* Jaeger[1] says, "Basically Plato's philosophy is a reincarnation of the religious spirit of earlier Greek education, from Homer to the tragedians."

In the third book of Gomperz[2] Greek thinkers devoted to the age of enlightenment, the first chapter deals with the influence of the physicians. He attributes the dawn of reason and straight thinking in science and government to the critical, investigative spirit of the Greek physicians and he considers the Hippocratic Oath a high mark in the course of civilization. Even Socrates, considered the incarnation of reason, employed his last breath in a tribute to medicine. Not only would Gomperz have us understand that the physicians initiated the age of enlightenment but Plato clearly indicates that good government comes only through enlightenment and insists upon the parallel between medicine and politics — medicine for the good of the body and politics for the soul. He "realized the importance for political life of scientifically refined intelligence". In *The Republic* he attempts to make education so effective that legislation would prove superfluous. In *The Laws* he makes legislation the instrument of education. Unfortunately, politics have never measured up to Plato's ideals. Democracies have come and gone, while medicine under the Hippocratic Oath, with its evolutionary variations has survived, always with stabilizing influence upon the progress of civilization.

Though it may not be easy, the medical profession must hold its high intellectual and moral position in society and exercise its influence in the course of political enlightenment and government action. The poet Hessoid, who came between the Aristocratic Homer and the high minded Pindar said, "The immortal gods have placed sweat before success." We have perspired editorially with the hope that collectively we might sweat for that degree of success necessary for survival. If scientific enlightenment was good for government in Solon's day, why not now?

1. Paideia: the Ideals of Greek Culture. Werner Jaeger. Translated from the Second German Edition by Gilbert Highet. Vol. 1. Archaic Greece the Mind of Athens. Second Edition. New York. Oxford University Press, 1945. Price $5.00.

2. Greek Thinkers, A History of Ancient Philosphy. Theodor Gomperz. Vol. 1, Translated by Laurie Magnus, M.A. London, John Murray, Albemarle Street, 1901.

LIBRARY OF THE

WHENCE COMETH AND WHITHER GOETH OUR DEMOCRACY

Originally our democracy was much like that practiced in the Athenian city-state of the Fifth Century B. C. "A people ruling—the very name of it is so beautiful." So said Herodatus the historian. The Athenian democracy, the democracy of all democracies, placed confidence in the average citizen, trusted him to do his duty and to use "good sense in doing it." *Trust the individual* was the shibboleth in Athens.

In its childhood—its best days, our democracy was like this. Then it was government by the people, and the people were bound only by the laws of their own making; they were impressed with their responsibility and proud of their part in national affairs. Today, in the United States, after 20 years of paternalism, social security, and subsidies, born of bureaucratic greed and distrust, many people have suffered a decline in competency, honor and integrity and are passively looking to the dole instead of striving for self sufficiency which is the badge of good citizenship. In Greece "anything which tended toward softening the body or character was sternly forbidden". This serious threat to our way of life is better known to physicians than to any other profession, group or class in the land. It is time for the physicians to employ their influence in defense of our one time cherished freedoms.

NUTS

Harvard graduates and verbose representatives of the administration make up binding rules and regulations which peanuts, pigs and peasants cannot understand and ultimately courts, friendly, or unfriendly, must crack down. This is inevitable in the welfare state where everything is either compulsory or forbidden.

A McAlester farmer feels the hand of bureaucracy which not only "giveth but taketh away". The farmer's "refusal to fill out forms on disposition of his peanut crop will cost Frank Turner, Pittsburg county farmer living south of McAlester, a penalty of $309.10. Turner "told the court he raised only 36 bushels of peanuts and did not market them but fed them to his hogs. He failed to file proper information with the Production Marketing administration and later neglected to reply to a PMA request for a report on disposal of his peanut crop."

The farmer's attorney said, "He is not a participant in the PMA and felt that he did not come under its jurisdiction. That's why he did not make a written reply. He didn't market his peanuts. He fed them to his livestock."

The U. S. District Judge whose authority is supported by the taxpayers' money, did not agree. The farmer could not afford an appeal because of the cost.

Physicians are no more worthy than good farmers who help fill the national breadbasket and they need not anticipate special favors if compulsory health insurance takes over. The pigs will get the peanuts while the physicians pay the penalty.

THE DOCTOR

Our readers should be alerted to the fact that RKO-Radio Pictures has released a 15 minute film entitled "Your Doctor." It shows how general practitioners are bringing good medical care to rural communities in remote areas. It will be shown in thousands of theaters.

Members of the State Association and the Auxiliary should look out for this feature and encourage all their friends and acquaintances to see it.

This should materially aid the Public Policy Committee and ultimately lighten the load of the Grievance Committee.

WHO'S RIGHT AND WHO'S WRONG

According to our way of thinking, as so-called rational human beings, God is on our side no matter which side we are on.

Our recent political convention and the subtle maneuvering of those in charge of party campaigns in behalf of the presidential nominees must severely tax the patience of God as well as many of His subjects here below. This from the poet of World War I serves as a good example.

"Gott strafe England and God save the King. God this, God that and God the other thing. 'Good God,' said God, 'I've got my work cut out.' "

Having learned that the understanding of scientific truth is difficult and its recognition often delayed, the members of the medical profession while awaiting the political outcome, unperturbed, will strive to do the work God has decreed.

Simultaneously certain bureaucrats and politicians unmercifully presume to cut the medical cloth for the God of mercy, while medicine trusts, and keeps its powder dry.

Scientific Articles

RHEUMATIC DISORDERS OF THE AGING

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Rheumatism is one of the most frequently encountered disorders seen in the patient beyond 40 years of age, yet it is not necessarily a part of the aging process. The presence of musculo-skeletal aches and pains indicates an abnormal state which is to be diagnosed properly and treated accordingly. It is convenient to classify the various types of arthritis, and these should be differentiated from other diseases of bones and joints. However, the general practitioner is not in a position to do extensive and expensive surveys of each patient with skeletal aches and pains. It is the purpose of this paper to outline a practical approach to the aging patient with rheumatism, and to set out simple methods by which he may be managed.

The cervical spine is the area most freqently involved with rheumatism. The symptom-complex which results is known as the "cervical tension syndrome" and consists of pain, aching, soreness or "cricks" in the neck. In addition, occipital headaches, sometimes with pain referred to the temporal or frontal areas may result, and not uncommonly, sharp pains radiate over the scalp, face or chest. "Dizziness" or unsteadiness of balance may occur. Sooner or later, if the process continues, pain occurs in the shoulder, arm, or may even radiate into the hand. When the shoulder or arm is involved, the terms "bursitis," "neuritis," "neuralgia," "tendinitis," "tenosynovitis," "fibrositis," "myositis," and "myofascitis" are used. Occasionally, a true nerve radical (radiculitis) is involved and results in pain and paresthesias and the diagnosis of "ruptured disc" of the cervical spine is sometimes made. The most common causes of shoulder-arm pain in patients beyond 40 years of age is trouble in the neck.

A small per cent of these patients with a cervical tension, shoulder-arm involvement goes on to develop a more severe process. The pain in the arm takes on a burning, stinging character, the shoulder pain becomes more intense, possibly localizing to a small area. As a rule it is unilateral, but may be bilateral. Soon the motion of the shoulder becomes limited and the humero-scapular joint may freeze. This situation is known as "periarthritis," "humero-scapular fibrositis," "frozen shoulder syndrome," "pericapsular fibrositis," "shoulder-hand syndrome," and if a calcified mass shows in the radiograph, "calcific bursitis." A few of these patients with the frozen shoulder proceed on to involvement of the hand with swelling, pain, burning and limited motion of the fingers due to an ischemic fibrosis of the palmar fascia and the tendons and their sheaths. As a rule, there is local heat, or coldness, cyanosis, or redness with sweating of the hand. When this complication occurs, the terms "shoulder-hand syndrome," "ischemic paralysis," "post-coronary sclerodactylia," "Volkmann's contracture," "Dupuytren's contracture," "causalgia," or "reflex sympathetic dystrophy" are used. On rare occasions, the patient with this severe shoulder-hand involvement continues the severe course, and other joints become inflamed, possibly resulting in crippling and contractures. The disease process is then known as "rheumatoid arthritis" or "atrophic arthritis."

Fortunately, most patients do not go beyond the "cervical tension syndrome" stage of this process, Fortunately also, is the fact that this process is reversible up to the rheumatoid or polyarticular reaction. This latter complication can result in permanent contractures.

When one considers the cause of the inflammatory reaction in the cervical spine, many factors must be taken into consideration. The most common cause is a simple fatigue or stress reaction. This type of inflammation would be comparable in degree to the pain resulting from holding the arm stretched out from the side too long, or the stiffness and soreness the day following exercise, or the more severe reaction such as a blister in the hand following the use of a shovel. This type of neck stress is usually postural or occupational in nature, consist-

ing of a forward-thrust position of the head and neck which Paul Williams refers to as a "spectator's attitude." Occupations such as typing, sewing, working over a low table, car driving, positional strains such as reading in bed, sleeping on a high pillow, viewing television, and the postural strain resulting from dorsal kyphosis or round shoulders," most commonly underlie the strain which causes the cervical tension syndrome. Nervous tension through provoking the "on guard" attitude, magnifies or can cause this syndrome.

If the radiograms of the neck and shoulder are normal, this process is called "fibrositis" by some, and "psychosomatic rheumatism" by others. If lipping of the cervical vertebrae is present, the term degenerative, hypertrophic or oteoarthritis is used. If the lipping and narrowed joint space are limited to one vertebral interspace, the term "ruptured disc" is sometimes applied. Reversal or loss of the normal cervical curve in the radiograph indicate inflammatory reaction and is significant. If there is calcification of the intervertebral ligaments with bamboo-pole appearance, the terms rheumatoid spondylitis, or arthritis, ankylosing spondylitis, or Marie Strumpell's disease are given.

Anatomical deviations, more specifically a high dorsal kyphosis, or "stooped shoulders," underlie a large group of these patients. Juvenile epiphysitis is the usual cause of the deformity and the lipping. The more the upper dorsal spine stoops forward, the more the cervical and lumbar areas must compensate by lordosing or hyperextending. It is this hyperextension in the areas of the reversed curve of the spine that causes the fatigue, strain, and results in degenerative process in the neck and low back. Not uncommonly in the aging, kyphosis or stooping develops, aggravating any existing postural defect, or in many instances when the kyphosis is severe, causing the postural defect and resulting strain.

Kyphosis in the aging is most frequently caused by post-menopausal or senile osteoporosis. This partly accounts for the predominance of females having these complaints. Any demineralizing process of the spine can result in this type of vertebral collapse with its subsequent tendency for postural strain. Nutritional osteoporosis, renal or nutritional osteomalacia, multiple myeloma, hyperparathyroidism and other diseases have been observed to be the cause. The spine, when involved by these disease states, not only undergoes postural changes, but becomes susceptible to strain and stress resulting in degenerative inflammatory reactions.

It should be pointed out that it is quite possible for a person to have the postural defects resulting from kyphosis of the spine without pain or symptoms. Discomfort results from the inflammation of stress, and to get this, the patient must aggravate the postural defect by going beyond his strength or endurance. Consequently, the treatment of these patients consists not only of correcting the postural strain and underlying bone or joint disease, but controlling as well the conscientious or compulsive drive which caused the patient to exceed his endurance.

TREATMENT OF CERVICAL RHEUMATISM

The management of the cervical tension syndrome is usually simple and effective. The correction of the postural strain consists largely of teaching the patient to recognize the fact that his activity is in part responsible for the strain. Reading in bed, sewing, card playing, ironing, and sitting with the head and shoulders slumped forward, are prohibited until symptoms subside. Car driving, the use of bifocal glasses, reading, being a "spectator," and other strains are pointed out to the patients as potential aggravating strains. Ruth Jackson[3] has pointed out the importance of using a proper pillow. A small, soft pillow which is placed under the neck and does not prop the head forward is used.

The use of neck traction, manual or with a head sling, properly applied is very effective in most patients. Heat, massage and counter-irritants likewise are helpful. Deep breathing exercises to elevate the ribs, extension exercises of the muscles of the dorsal spine, and general outdoor exercise for muscle tone must be done to relieve fatigability in all patients with sedentary occupations and habits. Each patient has to be convinced of the above postural strains and "sold" on the use of traction, home physical therapy and exercises.

The control of any underlying bone or joint disease which may be present is the only phase of the treatment which may require laboratory or radiographic aid. One is justified, however, to proceed with treatment on an empirical basis and only when the patient fails to respond to the initial treatment are the extensive laboratory and

radiographic examinations necessary to establish a more accurate diagnosis. The most common problem is the back undergoing the stooping or demineralizing process.

If the patient is a woman and dates her symptoms from the menopause, artificial or natural, then estrogens and androgens should be tried. Their effect may be prompt and specific in relieving the pain and associated complaints. The dosage required varies with each individual. Enough of each should be given to control the complaints. The ratio of estrogens to androgens varies according to the patient's tolerance of each. Several pharmaceutical firms now have tablets available which combine both of these steroids and are satisfactory for the average patient. They can be given two to five times weekly and may be eliminated for one week out of each month. This type of therapy is also indicated in patients with senile osteoporosis (post-menopausal osteoporosis in patients beyond 65 years of age).

If the stooping or decalcification of the spine is beyond what would be expected for the patient's age, then one should look beyond low steroid (post-menopausal) osteoporosis for the cause. Also, post-menopausal states are rare in men younger than 65 years of age, but can occur. In men with osteoporosis who are older than 65, the use of sex steroids is indicated.

Osteomalacia (rickets) associated with chronic kidney disease is not uncommon. The history of kidney disease with a fixed low pH (acid) urine, an increased urine calcium output (Sulkowitch reagent or history of stones), and a lowered plasma CO_2 combining power, indicate renal osteomalcia. An elevated serum calcium and alkaline phosphatase, with a lowered serum phosphorous indicate that a complicating secondary hyperparathyroidism is present. Renal osteomalacia and its complicating hyperparathyroidism is treated by controlling the acidois. The kidney is unable to manufacture ammonia and calcium is used by the body as a buffer. Potassium citrate and sodium citrate are used in sufficient amounts to control the acidity and excess urine calcium excretion. An average of 15 to 20 grains daily is required as an average maintenance dose. In many patients, the sex steroids are indicated to be used with the potassium and sodium citrate. Vitamin D and calcium are given routinely when the buffers are started.

Low protein osteoporosis and other nutritional deficiencies may cause osteoporosis and muscular fatigibility. The poor eating habits which many older patients have and gastro-intestinal disorders account for most of these nutritional problems. A balanced, high protein diet is indicated and frequently, supplementary vitamins, proteins and minerals are indicated during the healing phase.

Osteoporosis is a failure of the trabeculae to be formed; osteomalacia is a failure of the trabeculae to be mineralized (calcified). Nutritional osteomalacia (rickets) is rather rare in older patients and is more apt to occur in the presence of gastro-intestinal tract disease, or a severely restricted diet. A lack of sunlight may contribute. The radiograph reveals demineralization which is indistinguishable from the other rarefying disease of bone. Fifty per cent of the mineral substance of a bone must be gone before radiographic changes occur. The diagnosis of osteomalacia is suspected when there are nocturnal leg cramps, and the demineralization of the radiograph is beyond what would be expected for the patient's age. It is diagnosed by an elevated serum alkaline phosphatase six to eight Bodansky units), a lowered or absent urine calcium, and low to normal serum calcium and phosphorous levels. Vitamin D and calcium are indicated when this disease is present and are continued until the underlying cause has been corrected.

Rarely, other diseases may produce kyphosis. Myeloma, tuberculosis, metastases from tumors and osteitis deformans (Paget's disease) have been observed as causative agents.

When the patient has been indoctrinated with the postural management of his neck and the definitive therapy of the underlying bone or joint disease has been worked out, it is then necessary to control the general fatigue and stress of the patient. This is usually the most difficult part of the treatment. These patients as a whole are conscientious, tense and habitually drive themselves beyond their endurance. Most of them sleep poorly which increases their fatigue to the point of nervous tension or anxiety. Frequently, the occupation of these patients is monotonous or exacting and doesn't go well with the tense, aggravated or "hurry-up" attitude which many possess. Most subjects with cervical rheumatism are intelligent and apt to be mothers, school teachers,

Catholic nuns, farmers or professional people.

Whereas each patient presents his own problem, certain principles of management can be followed in the tired, tense subject. First, he must be taught to rest when he is tired and not force himself beyond his endurance. Frequent breaks in his occupation are necessary. One can use the example of a blister on the hand, resulting from overuse, to illustrate inflammation from stress. A good many of these patients welcome a good excuse to slack up in their endeavors, but want "authority" to do it. Occasionally, the home or family relationship must be altered.

One method to improve their sleeping habits is to insist on a daytime nap, as without a midday rest, they become "too tired or keyed up" to sleep. The use of the example of a fretful, crying baby who has missed his nap may impress them. Outdoor recreation and exercise produce improvement in fatigability and thereby improvement in sleeping habits. To escape boredom, the subject should always keep something planned ahead to which he can look forward and be somewhat enthused about. Sedatives and analgesics are necessary from time to time to control exacerbations.

Most patients will respond satisfactorily to the above management, but from 20 to 30 per cent will not. This group not responding has to be investigated further. Possibly they have one of the more uncommon causes of bone rarefaction mentioned above, or have a more unresolvable nervous tension syndrome. More likely, however, is the possibility of rheumatoid arthritis instead of a degenerative process. If joints other than the spine, fingers or knees are involved, then rheumatoid arthritis is probably present. An elevated sedimentation rate, secondary anemia, elevated serum globulin, lowered serum albumin would tend to confirm the diagnosis. The outlook of rheumatoid arthritis in the older patient is slightly better than this disease in a young adult, as there is a greater tendency for a natural remission.

TREATMENT OF RHEUMATOID ARTHRITIS

The relationship of infection to rheumatoid type reactions is still unknown. Many patients have been relieved by the extraction of an infected tooth (more who haven't), or by elimination of an infection. The concept of Brown and his co-workers,[4,5] which regards the "L organism" or a "pleuropneumonia-like organism" as the cause of rheumatoid arthritis is worth consideration. They state that this ultramicroscopic organism becomes intracellular, emitting antigens which provoke the hyperimmune reaction in the collagen fibers known as rheumatoid arthritis. They have proposed as a method of control the use of Terramycin in 10 to 25 mg. doses given once every 48 to 72 hours. The rational for the use of such small amounts of an antibiotic seems unfounded. However, these investigators present evidence that small doses of the antibiotic inhibit growth and development of the organism. Larger doses provoke bowel upsets and flare-ups of the arthritis with marked consistency. Whether the effects of the small doses of antibiotics is directly on the pleuropneumonia-like organism or on a rearrangement in protein metabolism toward a more favorable antigen-antibody reaction is not known. This substance has been used in stock and poultry feed for some time. In our experience over one year, the results from the use of these small doses of Terramycin in the older age group of patients with rheumatoid arthritis have been of sufficient benefit for us to include this type of therapy as part of the general management of this particular group of patients.

Gold is still effective in 30 to 50 per cent of patients with rheumatoid arthritis. The use of Cortisone or ACTH is indicated in severe flare-ups or in the febrile patient. They also may be of specific value in the acute reflex dystrophies. Testosterone in 10 to 75 mg. doses is frequently helpful, and pregenenolone, when effective is the best steroid to use as it has no undesirable effects. Butazolidin (Geigy) and Lilly's Aminosteriod to use as it has no undesirable effects.

The general management of rheumatoid arthritis is still of the greatest importance. Freedom from stress, adequate nutrition, blood transfusions or human serum albumin, physical therapy and orthopedic principles of management must be applied in all patients.

THE LOWER BACK

The area involved next in frequency with rheumatic disorders in the aging group of patients is the low back. Pain, stiffness, and soreness are found in the lumbar area, referred into the sacro-iliac and hip areas with aching of the legs and occasional ac-

companying radicular pains in the sciatic tract occur. Cyccygodynia and "sacro-iliac disease" are usually the result of lower lumbar spine involvement. What has been said of the neck applies equally well to the low back. The hyperextension (lordosed) position produces the strain, kyphosis aggravates it through growth development or later rarefying bone diseases, and the patient's temperment perpetuates it. It is in the two areas of the spine where the curve is reversed, i.e. the neck and low back, that most pain occurs. Weight bearing in these areas is through the facets rather than through the vertebral bodies. Also, the greatest hydraulic pressure in the intervertebral spaces is in the posterior areas in these two zones, giving rise to a tendency for posterior protrusion of the nucleus pulposus in these two areas.

Relieving stress in the peripheral joints is easily accomplished by simply not using the part. The spine, however, has won a bad reputation because it can be strained when at rest. Lying on the adbdomen, or on the back with the knees straight, sitting with the knees lower than the hips, or standing still, particularly with the hips slightly flexed and the knees extended, are excellent ways to strain the lower back. These positions increase the lordosis of the lumbar spine. Occupations such as ironing, sweeping, working at a bench or sink, caring for babies, driving a car, or particularly a tractor, are well-known methods of producing back strain.

To protect the lower back from strain the patient is taught to avoid swayback at all times by placing one foot on a step or stool when standing, crossing the legs, or by placing the feet on a stool with the knees flexed when sitting, keeping his knees and hips flexed (lift under knees) when lying in his back.

Exercises to strengthen the abdominal muscles and stretch the lumbar muscles as outlined by Paul Williams[1,2] are then taught each patient.

The same management for any existing bone or joint disorder as outlined under the care of the neck is applied to the low back strains. Most patients with neck complaints have low back pains sooner or later, or vice versa.

OTHER JOINT COMPLAINTS

The knees are third in the list of frequency of joint complaints with the interphalangeal joints of the fingers being a close fourth. Therapy is similar to that of degenerative arthritis of the spine. Degenerative type of joint disease is by far the most frequently encountered type of arthritis in the aging group. If the wrists, elbows, ankles or metatarsal areas are inflamed, one knows that he is dealing with a more severe form of arthritis, probably rheumatoid. Gout must be considered, however, in the diagnosis of male patients in this age group.

GOUT

The existence of gout is suspected when there is a severe, sudden, monarticular attack of arthritis in a peripheral joint. Unless it is his first attack there is a history of previous similar attacks which subsided spontaneously in five to 21 days. The attack was precipitated by stress such as a minor injury, surgery, fatigue or nervous tension. Acidosis (ketosis), or an injection of liver extract or a mercurial diuretic may precipitate the articular phase of gout. The disease rarely occurs in females (five per cent), and in private practice, gout should account for two to three per cent of older adults with arthritis. Colchicine is still the method of choice in controlling the acute attack, 1/100 grain orally every two to three hours until the pain subsides or a bowel upset occurs. The patient should be fed during the attack and should be relieved of stress by placing him at bed rest. Between attacks, fats and high purine containing foods are restricted. Recently a new drug, Benemid* has been introduced. This substance is quite effective in causing the serum uric acid level to return to normal, but it has not yet been proved that it reduces the number of joint attacks. Its method of action is not known. This drug will probably prove to be of most benefit in the tophaceous (chronic) type gout.

CONCLUSIONS

1. Rheumatism is a prominent complaint in the aging subject but is not a necessary part of aging.

2. Degenerative joint disease is the most frequently encountered type of inflammatory process and involves the neck, low back, knees and fingers in that order of frequency.

3. Involvement of the neck and low back sets off a myriad of symptoms controllable by correcting the general stress and fatigue of the patient, the postural strain present,

and by correcting any existing bone or joint disorder capable of producing kyphosis of the spine.

4. An involvement of peripheral joints other than the knees or interphalangeal joints of the fingers ordinarily indicates a rheumatoid type of arthritis (two to three per cent of patients with peripheral joint inflammation in the aging group have gout).

5. Degenerative arthritis and rheumatoid arthritis are differentiated from other diseases such as osteoporosis, ostemalacia, multiple myeloma, tuberculosis, tumor metastases and osteitis deformans.

*Sharpe & Dohme

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EARLY MANIFESTATIONS OF CARCINOMA OF THE LUNG

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The over-all cure rate of bronchogenic carcinoma (five to six per cent) points up the necessity of earlier diagnosis and treatment of this dread disease. Since it has become, after the stomach, the most common internal cancer of the body, we must ever be on the alert for its earliest manifestations.

It is unfortunately true that of each 100 cases seen, about one-third will be clearly too far advanced for any definitive treatment, one-third will be non-resectable upon exploration and one-third will be resectable. (1). Since approximately two-thirds of the cases when first seen by the thoracic surgeon are beyond help, there is here an obvious opportunity to improve our early diagnosis. Many cases, of course, do not seek medical advice early enough, and here we must rely upon continued education for the lay public. An additional number of cases are beyond help at the time of the first symptom and will represent the always irreducible minimum of incurable cancer awaiting more effective methods of treatment. There is however, a large percentage of cases whose cancers are so early as to be obscure and difficult of diagnosis at the time of the initial medical consultation, and who therefore are given symptomatic treatment until the diagnosis has become obvious and the time for cure past. It is in an effort to point out the significance of these early symptoms that this paper is presented.

The listed symptoms of bronchogenic carcinoma and their frequency as given by various authors are given in Table I (2), (3). When several of these are present in a given case, the diagnosis is usually thought of automatically, and by the same token, the disease is usually advanced. Every case begins with a single symptom, usually cough, and the others are added at a varying rate of speed. Many lives could be saved if a chest x-ray were taken on every patient wanting ". . . a little something for my cigarette cough. . . .".

Many patients will date the onset of the disease from an acute respiratory infection, influenza or the like. Careful questioning, however, will most frequently elicit previous symptoms, usually in the nature of a dry cough but also including insidious loss of weight and strength, discomfort in the chest, and so forth. The presenting symptoms at the time of the anamnesis are usually late manifestations of advanced disease. In Ochsner's series (4) there was an average delay of 12.3 months from the onset of the first symptom.

Such a variety of findings may be present on the x-ray film, as will be demonstrated, that it is always dangerous to rule out or in a diagnosis of cancer of the lung on the basis of what is seen. Hilar densities, peri-



FIG. 1—(Case 1)—Peripheral density right upper lobe, invading ribs and producing local pain.



FIG. 2—Case 2)—Peripheral circumscribed density, right mid-lung field. Patient asymptomatic.



FIG. 3—(Case 3)—No evidence of active pulmonary pathology. Inoperable carcinoma, left bronchus.

pheral densities, atelectasis, emphysema, abscess, pneumonia and infiltrations may all be carcinoma. No positive x-ray finding of this nature, in which a diagnosis has not been made of other disease, should be observed for longer than four weeks before definitive procedures are undertaken (bronchoscopy, exploratory thoracotomy) and in most cases this delay is unnecessary.(5) It is perhaps helpful to think of a mass seen on x-ray in the same manner as a mass felt in the breast. It is of course necessary to biopsy or excise a breast mass for diagnosis, to be followed by radical operation if cancer is present; it is equally necessary to biopsy or excise a mass in the chest for diagnosis to be followed by radical operation if cancer is present.

In the presence of clinical and x-ray findings of doubtful nature much help is often obtained by bronchoscopy and sputum examinations. Even if a tumor is not actually observed on bronchoscopy, ancillary findings such as narrowing, distortion or fixation of the bronchus may be present, and biopsy of abnormal-appearing areas of mucosa may show squamous metaplasia or carcinoma in situ, good evidence of a nearby carcinoma. Cells are frequently found in the sputum, even in very early cases, and repeated cytologic examinations should be made if facilities are available.



FIG. 4 — (Case 4) — Subsiding pneumonia right upper lobe (peripheral density). Hilar density is carcinoma and right mediastinal bulge is metastatic nodes.



FIG. 5—(Case 5)—Comparison of two sides shows hyperaeration of left lung. Obstructive emphysema due to carcinoma.



FIG. 6—(Case 6)—Right hilar carcinoma. Successful pneumonectomy done eight months after this film was made.

TABLE I

	OCHSNER %	RIENHOFF %
Cough	92	71
Weight Loss	79	39
Chest Pain	67	53
Hemoptysis	61	63
Respiratory Infection	60	31
Dyspnea	60	23
Weakness	22	
Hoarseness	7	

The following case reports are given to illustrate varying aspects of carcinoma of the lung and the difficulty of its diagnosis.

CASE 1—J.B.M. This sixty-six year-old white male had first noticed an arthritic-type pain in the shoulder about six months before. However, for two weeks preceding consultation (1-15-52) the pain had become of a different nature and had centered in the upper ribs in the axilla. There had been a persistent soreness in this area and some numbness and soreness on the inner side of the arm for the past four days. He had had a mild cough for two weeks productive of thin phlegm. He never had any hemoptysis or other respiratory symptoms. Physical examination was entirely negative except for mild tenderness over the right 3rd rib in the anterior axillary line. X-ray examination (Fig. 1) revealed a small circumscribed lesion of the right upper lobe invading the 3rd and 4th ribs in the anterior axillary line. He was admitted to the hospital 1-27-52 for bronchoscopy, which was found to be essentially normal. Exploratory thoracotomy was done 1-30-52 and a carcinoma of the right upper lobe found, invading ribs 2, 3 and 4 in the mid-axillary line. A right upper lobectomy was done and the 2nd, 3rd and 4th ribs removed in their entirety en bloc and in continuity with the lobe. As far as could be told grossly, the lesion was well-encompassed on all sides. Microscopic examination of this lesion revealed it to be a keratinizing squamous cell carcinoma invading the ribs. The patient had an uneventful convalescence and when last seen 10-1-52, had no evidence of recurrence of the lesion, was working steadily and was without complaints except for some continued soreness of the right shoulder.

COMMENT: This case illustrates that a peripheral carcinoma may not be expected to produce any respiratory symptoms but will usually make itself manifest by invading contiguous structures. Here the first and virtually only complaint of this man was the pain incident to bony erosion by a peripheral lesion.

CASE 2 — P.S. This fifty-three year-old white male was without symptoms except for mild nervousness when he was given a complete physical examination in February, 1952. This examination by his internist was completely normal, but a routine x-ray showed a very faint coin lesion in the right mid-lung zone (Fig. 2). There were no symptoms at all applicable to the respiratory system. He was admitted to the hospital and bronchoscopy done 3-11-52 was entirely normal. Bronchial secretions showed no malignant cells. Exploratory thoracotomy done 3-13-52 revealed no abnormalities except a 2 cm. nodule in the lateral segment of the middle lobe, with some puckering of the pleura over it. This nodule was excised in toto and frozen section revealed it to be an adenocarcinoma, therefore a total pneumonectomy with dissection of the mediastinum was done. The pathological examination of the specimen showed a bronchogenic adenocarcinoma of the middle lobe with no evidence of metastases in the peribronchial and mediastinal nodes. The patient's convalescence was uneventful and he has since returned to work, and when last seen 7-15-52 was without complaints except for dyspnea upon exertion. He has maintained his weight and his progress is satisfactory.

COMMENT: This case represents an exceedingly early carcinoma of the lung whose diagnosis was made in a fortuitous fashion. If an x-ray had not been made incident to a routine complete physical examination, it would no doubt have been several more months before this lesion had grown enough to invade contiguous structures and cause some symptoms. This is the type of case in which we have our best chance for cure.

CASE 3 — I.P. This sixty-two year-old white male had symptoms of cough, hemoptysis, weight loss and pain in the left chest for three months. When examined by his internist, the clinical diagnosis of carcinoma of the lung was obvious in spite of the comparatively short duration of the symptoms. He was admitted to the hospital for complete physical examination, which was negative except for evidence of weight loss and chronic illness. X-ray examination of the chest (Fig. 3) was entirely normal except

for slight tenting of the right diaphragm. There were no findings upon which one could make a diagnosis of bronchogenic carcinoma. In spite of the negative x-ray findings, the clinical picture was very definite, and the patient was bronchoscoped 6-28-52. A bleeding lesion was found in the left stem bronchus just past the carina. A biopsy showed carcinoma. The patient was prepared for thoracotomy, which was done 7-10-52. The left chest was entered through the 3rd interspace anteriorly and a mass found in the bronchus within the curve of the aorta. The pulmonary artery was ligated intrapericardially after dividing the ligamentum arteriosum. After the exposure afforded by this maneuver was obtained, it was found that the carcinoma had invaded through the wall of the bronchus and into the wall of the aorta. The lesion was therefore inoperable and it was necessary to close the chest. The patient recovered from surgery and was discharged on his eighteenth postoperative day for terminal care at home.

COMMENT: Here is an incurable lesion of the lung, diagnosed and treatment attempted before any positive x-ray finding had developed. This represents the irreducible minimum of cases, incurable because of location or early spread. It is noteworthy that a positive x-ray finding is not always present and therefore further investigation, namely bronchoscopy, must be undertaken whenever the clinical symptoms are strong enough to warrant it.

CASE 4 — H.S. This forty-four year-old white male was in good health and had no symptoms that could be elicited until 4-7-52 when he had an acute onset of right pleuritic pain, productive cough, night sweats, fever and prostration. A diagnosis of pneumonia was made and he was admitted to the hospital and given heavy doses of antibiotics. He improved on this treatment. X-ray studies at the time of admission showed a peripheral shadow in the right upper lobe compatible with pneumonia. He was discharged improved upon the 20th, but the symptoms of cough and expectoration of sputum persisted and he was re-admitted on 4-28-52 for further studies. Bronchoscopy done 5-14-52 showed mucosal inflammation but no lesion. Further x-rays, taken at this time (Fig. 4) showed a persistence of the shadow in the right upper lobe and a shadow close to the hilum. Following these examinations the patient was much improved and became asymptomatic. He had gained weight and had no cough or fever. Because of the persistence of the shadow in the right upper lobe for longer than four weeks, exploratory thoracotomy was carried out on 6-10-52. The right chest was entered through the right 3rd anterior interspace and a bronchogenic carcinoma was found with extensive mediastinal metastases. It was obviously inoperable and after biopsy had been obtained the chest was closed. Pathological examination showed a metastatic adenocarcinoma in the lymph nodes. The patient recovered from surgery and was given a full course of x-ray treatments without any result. He was discharged for terminal home care. At the present time he is losing ground rapidly.

COMMENT: This case illustrates how carcinoma may manifest itself as an acute respiratory infection masquerading as pneumonia. This man had pneumonia and was treated for it, but the underlying pathology was carcinoma of the lung, and it was not until the pneumonia had failed to resolve and the symptoms recurred that it could be determined that he had any more than ordinary pneumonia. Carcinoma should always be kept in mind in any acute inflammatory respiratory process if it does not completely resolve, both clinically and by x-ray, within four weeks.

CASE 5 — C. W. This thirty-six year-old white male was in good health until January of 1952, when he developed a mild upper respiratory infection from which he never completely recovered. He had had frequent colds since then, and for the past two weeks had had weakness and dyspnea on the least exertion. He had a chronic cough since January, 1952 and had spit up blood in March. He had constant pain on the left side, worse for the previous two weeks. He described his complaint chiefly as ". . . unable to get air into my left lung." With these complaints he had consulted three physicians who were unable to find anything definite upon physical examination. The fourth physician referred him for further work-up as a possible pulmonary lesion. Physical examination was entirely normal except for an inspiratory squeak throughout the left lung field. X-ray examination (Fig. 5) showed a hyper-illumination of the left lower and mid-lung zones with no evidence of any masses or atelectasis. The patient was hospitalized 6-28-52 and bronchoscopy revealed a friable

bleeding lesion in the left stem bronchus. This was biopsied and pathological examination showed a squamous cell carcinoma. A left pneumonectomy was done 7-1-52 and no evidence of any mediastinal extension was found. Pathological examination showed that the tumor was completely endobronchial. The patient made an uneventful recovery.

COMMENT: This case illustrates carcinoma of the lung manifesting itself as an obstructive emphysema, nearly missed upon review of the original x-rays.

CASE 6 — J.R. This forty-nine year-old white male first consulted his physician in October, 1950. At this time he complained of rawness in the throat, pain in the chest and dyspnea upon exertion, of eighteen months duration. He had had a persistent cough for the same period which had been dry until just before consultation, at which time it had become productive of a bloody mucous. X-ray at time showed density in the right hilum which was very suggestive of carcinoma. The man was informed that he probably had a tumor of the lung and bronchoscopy and further examination were requested. For reasons best known to himself however, the patient declined to have this done and was not seen again until June, 1951, at which time he presented himself with the same complaints of pain in the right chest, cough, dyspnea upon exertion and hemoptysis on two occasions. Physical examination was essentially negative except for the chest where there was an inspiratory wheeze over the entire right lung. X-rays (Fig. 6) again showed a density in the right hilum. At bronchoscopy a friable lesion was found in the right stem bronchus. This was biopsied and reported as carcinoma. Therefore on 6-8-51 a total pneumonectomy with dissection of the mediastinal nodes was carried out through an anterior approach. The patient had an uneventful postoperative course and was discharged on his twelfth day. Pathlogical examination of the resected specimen showed keratinizing squamous cell carcinoma of the right lower lobe bronchus with extensive metastases to the bronchial nodes.

This case has been followed at frequent intervals since operation. At last examination 6-9-52 he had maintained his weight, was working steadily on his farm and had less dyspnea than before surgery. The wound was solid and x-rays and physical examination showed no evidence of recurrence of his tumor.

COMMENT: This case illustrates how completely unpredictable carcinoma of the lung may be. While one case may be beyond help at the onset of symptoms, the next may persist for many months and still be operable, and indeed curable. This man knew he had a tumor of the lung for six months before anything definitive was done, and yet a successful pneumonectomy was performed and there has been no evidence of recurrence in the fourteen months following. Carcinoma must be aggressively attacked whenever found, as one never knows when metastases have or have not occurred.

DISCUSSION

Although the cure rate of carcinoma of the lung is quoted at a discouraging five to six per cent, it must be remembered that this is the result obtained of all cases seen, and includes approximately two-thirds of cases who are hopeless when first seen, or when operated upon. If one takes only the cases on whom pneumonectomy was done, the cure rate is between twenty and twenty-five per cent. This is an acceptable figure, and shows what may be obtained when cases are seen early enough for successful surgery to be accomplished. The difference between five and twenty per cent represents the increase which may be expected to obtain when carcinoma is more regularly picked up in its early stages.

The position of a tumor in respect to its position in the bronchial tree or in the lung has a great deal to do with the first symptoms which it will produce. Peripheral tumors will not show hemoptysis or occlusive symptoms until late. An endobronchial tumor in a major bronchus will produce early occlusive symptoms, either those of obstructive emphysema or of atelectasis, and early will produce cough and hemoptysis. Peripheral tumors of the lung usually are silent until adjacent structures are involved, and therefore may not be diagnosed until late. In general it may be said that ninety per cent of cancers have extended to structures outside the lung at the time they become symptomatic (6).

I have been struck by the fact that all patients with carcinoma of the lung that I

have seen in private practice have not only been smokers, but heavy smokers, all exceeding Graham's minimal criteria of one pack a day for twenty years. From 684 cases studies by Wynder and Graham (7), as compared with 789 cancerous male patients of the same economic and age groups, they found that 84½ per cent of general hospital patients were smokers and that 96½ per cent of those having lung cancers were moderate to heavy smokers from early years. The occurrence of carcinoma of the lung in a male non-smoker or minimal smoker was found to be only 2 per cent, while 96.1 per cent of cancer patients had smoked over twenty years. In 1,732 patients studied by Doll and Hill (8) and compared with 743 controls, they found a specific connection between carcinoma of the lung and smoking. Only .3 per cent of the men and 31.7 per cent of women with lung cancers were non-smokers. In the control group these figures were 4.2 and 53.3 per cent. In the carcinoma group, most were heavy smokers. Cigarette smoking appeared to be more closely related than pipe smoking. It is agreed by all that adenocarcinoma is less influenced by smoking habits than the squamous cell variety. One must therefore conclude that cigarette smoking is a predisposing factor in squamous metaplasia in the larger bronchi, which soon leads to formation of carcinoma in situ and frank carcinoma.

SUMMARY AND CONCLUSIONS

1. Some early manifestations of carcinoma of the lung are discussed and illustrated by case reports.

2. Chest x-rays should be a part of every diagnostic work-up, as much so as the routine blood and urine examinations, and there is perhaps merit in the suggestion (5) that a film should be taken every six months in heavy smokers over forty years of age.

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DEMOCRATIC JAPAN SOME PROBLEMS AND TRENDS

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THE OCCUPATION.

An era has ended

"Occupied Japan" is now a term in history.

Those who participated in the Occupation of Japan found it to contain inferior imitations of numerous things produced "Stateside"—a miniature industrial nation to be sure, but, one poor in raw materials and one schooled to progress too fast—Occupationaires will never cease to marvel as to how Japan with such limited resources was able to maintain the large-scale warfare which she did.

The Occupation was almost unbelievably benevolent in endeavoring to promote progressive ideas and humane measures. The first year was one of semi-starvation and want; however, by the middle of 1946, the negative phase was over and many reforms had been initiated; industrial rationalization and rehabilitation, hydro-electric expansion, land reforms, yen savings, the MacArthur Line, and collective bargaining along with other labor and social reforms all of these proceeded slowly, and sometimes unevenly, throughout the succeeding years.

THE PEACE TREATY.

In former days as a first-rate power, Japan was viewed with justifiable suspicion and distrust. Whatever pressures she may then have had to claim as justification for her program of colonization and expansion in her search for resources and "living room," these same pressures still are present and are even more intensified, for Japan has had to repatriate her nationales from her colonies, while she has lost territories and their resources; Sakhalin and Kuriles (oil), these are now Communist "hot-spots," . . . how well the members of Oklahoma's 45th Division know this! Korea (rice); Formosa (sugar); Manchuria (wheat and soya beans).

Now, by virtue of the Peace Treaty, Japan has regained sovereignty and returns to the family of nations as a not-too-firmly established democracy with many problems; she still is watched with great distrust.

What are some of these problems?

Should we of the Western world in general, and Americans in particular, be interested or concerned . . . ???

For many months we have seen how one group of Orientals (? "Korean" Communists), who with a sense of values differing entirely from ours, and unduly prolonging honest and sincere endeavors to reach an armistice through reasonable understanding. Although the United States has accepted Japan's friendship almost without reservation, several of our former allies and some members of the United Nations have not done so. Of course the acceptance of friendship in itself does not solve problems, but it can contribute to a more sympathetic interest and the rendering of more intelligent assistance, both of which are necessary if Japan is to line up with the Western World against Communism!

SOME PROBLEMS.

In Japan, as in other countries, major problems revolve around three main factors, population — food — and business economy. Hence, loaning or giving money will not permanently solve basic problems—the purchase of products and goods helps. *The non-governmental spending by Occupationaires alone is about* $2,000,000.00 *a day* (souveniers, gifts and services). The Korean war boosted industrial levels to 135 per cent of those prevailing in 1935-1936; these are now dropping, textiles have been cut back 40 per cent and others are following.

1. THE PEOPLE.

In Japan some 85,000,000 persons are living on an area of land slightly more than twice the size of the State of Oklahoma, where we have a population of only 2,500,000.

Due to wartime evacuation, in 1945, the population of the capital city of Tokyo was down to 3,400,000. Despite government restrictions on population movements, by 1952 there were 6,700,000 persons residing in

Tokyo, giving it a population density of 50,000 persons per square mile—by contrast, Oklahoma City has less than 5,000 persons per square mile.

Of Japanese national characteristics certainly the most outstanding is their ability to work long and hard under the most adverse condition, 10-12 hours a day, seven days a week. With neither their religions nor their industries giving much consideration to the individual as such, and with so much manpower and womanpower readily available, it is little wonder they persist in the use of many apparently inefficient and laborious methods. The industrialists, however, have a paternalistic attitude and do not readily reduce their staffs when their business becomes poor, or even bankrupt!

Large families and poverty have led to a high rate of suicide and slave traffic. Annually thousands of individuals, both men and women, are indentured to farmers, textile industries, the entertainment fields and houses of prostitution. While many consider it a form of filial obligation and most individuals never really become free again, some girls are reported as having been sold by their families as many as 12 times. This practice was banned during the Occupation, but is reappearing with increasing frequency. In addition there are some areas—Oshima Island—where the services of individuals are obtained by "barter," mostly for quantities of rice; such persons do specified jobs for specified periods, usually farming or house-work, and this arrangement in no way permits slave traffic or prostitution.

2. CURRENCY AND INFLATION.

The unit of Japanese currency is the Yen; around 1930, it was worth 50 cents, but in 1939 only 20 cents, and now it is worth 3.6 to the penny or 360 to the United States Dollar. The degree of inflation has greatly exceeded that of yen devaluation; formerly a worker earned 40 yen a month and was income-tax free, now he earns about 14,000 yen ($40.00) per month and pays almost one month's wages per annum as income tax.

While salaries are usually quoted and paid on a monthly basis, most employers also pay annual or semi-annual bonuses; hence while the monthly wages quoted are low, they are usually augmented by bonuses. As previously stated a paternalistic pattern prevails and Japanese business men do not readily reduce the number of their employees when business hits a slump. A member of the Diet (legislative body) was defeated for re-election and when unable to get other work was reported to have accepted that as a laborer at 240 yen (66 cents) per day or $18.00 per month. Typists (females) usually receive $15.00 per month; male department store clerks $25.00 and street car conductors $27.50 per month. Living expenses for a family of three averages from $30.00 (10,000 yen) to $120.00 (40,000 yen) per month. The minimal cost of food for one person is from 27 to 41 cents per day, or $9.00 to $12.00 per month. Some other examples of common expenses are, white cotton shirt (man's) $3.50; tie $1.25; suit ready-made $55.00, tailor-made $75.00; overcoat $30.00; shoes (leather) $7.00.

Here are average wages and taxations as computed in dollar values:

	Millions of Persons	Average Ann'l Inc.	Tax Rate Pct.	Total Tax
Workers	8.3	$468.00	8.3	$ 39.00
Farmers	1.2	360.00	7.6	27.00
Business Man	1.4	870.00	17.7	153.00
Others		708.00	15.1	106.00

3. FOOD.

The main articles of food are rice, fish and vegetables. The average rice crop raised in Japan amounts to 325,000,000 bushels; with a population of 85,000,000 requiring approximately five bushels (1 koku) per individual per year (daily average of 12 ozs. per person), another 100,000,000 bushels must be imported. If rice were to be decontrolled, some 20,000,000 people would suffer from want. Likewise, fish is needed to the extent of 6,000,000 tons per year, this allows less than one-half pound per person per day, since the establishment of MacArthur line, the yearly catch is only 3,000,000 tons, so that 3,000,000 tons of wheat to make up for the protein deficiency are imported from the United States annually. The law prescribes a minimum 2,400 calorie value diet, which probably is not met by the present food supplies.

In Japan, only 20 per cent of the land surface is arable. (Oklahoma has 45-50 per cent arable land). The sides of the hills are terraced into narrow strips, this is especially so in the densely populated southern areas. Small patches of land, say 10 feet long and three feet wide will be cultivated intensively as it is of great importance in their struggle for existence. In the southern

areas, two crops per year are raised of necessity. On the northern island of Hokkaido, often called Japan's "Siberia," only one crop per year can be grown. The size of the average farm is around two and one-half acres, and farms when bequeathed always go to the eldest son; being too small to subdivide, second and third sons of families are compelled to leave. Under the Land Reform Act of the Occupation, tenants and farmers were given assistance in the purchase of land, but unfortunately each year more and more of the farmers were compelled by economic reasons to relinquish their farms, the rate of selling in 1951 being more than twice that of 1950; in some areas the rate increased by 28 times. As previously noted, farmers in desperation to raise money to retain their holdings have sold even their children.

In connection with the living standards and farms, the extensive use of electricity, especially for lighting purposes, is noteworthy; the power supply is poor, the hours of use often restricted and the current is low, usually being around 90-105 volts.

5. EDUCATION.

Probably Japan's most outstanding characteristic is the high degree of literacy; education is compulsory up the equivalent of American Junior high school. Due to the largeness of families and the loss of many school buildings, Japan has a tremendous problem in maintaining its education system. There is a lack of teachers, as well as a shortage of classrooms—the city of Tokyo alone needs about 3,000 classrooms for its average annual primary enrollment of 120,000—thus children attend school half-days only, one group in the morning, the second group in the afternoon. It is anticipated that it will require at least three years to overcome this deficiency.

Except during the war years, the English language was taught and studied extensively, so that most well-educated Japanese have had three to five years instruction; thus while many physicians can read and understand English, they have lacked the opportunity to become fluent in the conversational form.

Co-education was adopted in 1947 but does not seem to be too well accepted; due to opposition voiced by "PTA's" and Boards of Education, the Ministry of Education is considering the abolishment of co-education. Incidentally, recently for the first time in Japanese history, a member of the royal family has attended one of the public schools for advanced education.

6. MEDICAL, DENTAL AND NURSING SERVICES.

Prior to World War II, there were only about 60 doctors who had been trained in either Europe or America. These formed the nucleus of the more highly-trained professional men, and they were able to keep Japan abreast of medical research and advances. The predominating influence has always come from Germany—drug dosages are still given in amount *per day*, rather than *amount per single dose*—that source of medical influence was deteriorating rapidly during the Hitler regime and did more so after the actual outbreak of war, thus lowering the Japanese standards more than they themselves realize.

The looseness of the standards of medical education, coupled with the demand for physicians within Japan as well as in her colonies, allowed a great number of unqualified persons to become engaged in the practice of medicine. The year 1952 will witness the end of that era, as with it, the last of the poorer-grade medical schools will be closed. With improved training and better-trained graduates, the quality of medical care will rise.

For similar reasons, during the war all dental activities completely collapsed and dental professional standards became very low.

The Japanese nursing program was even less fortunate. Three separate nursing associations existed under government control. All of the officers were men, the nurses and midwives had no voice in their management. There was a slight trend toward standardization but during hostilities this failed. Since 1949, demonstration-schools of nursing and three-year courses of nursing with good standards have been established. More and better trained nurses are becoming available, however they do not receive the professional consideration nor enjoy the social prestige of their American counterparts.

Before the war, civilian hospitals were "closed" institutions and they suffered severely during the war years; military hospitals were given preference on all supplies and equipment. Cooking equipment, especially metallic items, were removed to be

used in the war effort; hospitals were unable to feed their patients and operated at less than a quarter of their normal capacities. Since these conditions also affected sanatoriums for tuberculosis patients, many went home and this in turn undoubtedly contributed to the "seeding" of the disease. During the Occupation all former Army and Navy Hospitals were placed under the control of the Ministry of Welfare and were operated as National Hospitals. They have remained so, but now are "open," and any qualified physician cantreat patients in a National Hospital. There are available approximately 185,000 beds for general medical and surgical care, the daily average of occupancy being 80 per cent.

7. HEALTH AND SANITATION.

Here several achievements are noteworthy.

Firstly, following the repatriation of Japanese nationales and prisoners of war, no epidemics occurred.

Secondly, the application of quarantine and other measures promptly controlled two outbreaks of small-pox which did occur; the first of these outbreaks (1946) was in the southern area, the second outbreak (1950) occurred in the Port-City of Kobe. The control of the second outbreak became outstanding by the fact that 1,000,000 *persons were vaccinated within a seven-day period!*

Some of the important diseases and their rates (based on per 100,000 of population per annum) are:

a. Tuberculosis. The reported death rates were in 1918—253; in 1945—280, at which time all sanitoria were practically empty due to the lack of food and feeding facilities. In 1947, it was estimated 280,000 new cases developed each year. This year (1952) there are approximately 120,000 beds available for the care of tuberculosis patients, with a daily average occupancy of over 90 per cent. While the reported incidence of disease was low, pre-employment examinations of several hundred thousand applicants rejected about five per cent for tuberculosis alone. One island (Hokkaido) with a population of 4,000,000 had 29,000 new cases reported for the first 11 months of 1951. Streptomycin is available on the open market for less than $1.00 per gram; however, treatment in government hospitals until recently was limited to only 40 grams per patient, this restriction is now being relaxed.

b. Venereal diseases. Prior to the war, these were *not reportable as they were considered as diseases only of prostitutes!* Prostitution, while not actually legalized, has been recognized and accepted as a not dishonorable profession by which women may earn enough money to retire, get married and raise families.

There are union prostitutes (they carry health and union cards) and non-union prostitutes plying their trade. The only control ordinance even in large cities is against street soliciting.

Abortions are legally countenanced in Japan; for 1951 some 638,315 were reported as having been done.

c. Other Diseases. Some of the more important diseases and their incidence (rates per 100,000 of population per annum) are as follows:

Diptheria 1948—20.3
Whooping cough 1948—66.0 with 10 per cent mortality
Typhoid and paratyphoid fever in 1924 was 100 which by 1948 had dropped to 11.

Dysentery was and is very prevalent; in 1940, the rate was 200, with a peak of 400 in that summer. In 1950 some 46,000 cases were reported with 21 per cent mortality; in the first 10 months of 1951, about 81,200 cases with 13 per cent mortality were reported.

The factors which enter into the high incidence of infectious diseases include inadequate water system, lack of water treated to make it safe for consumption, inadequate sewage disposal systems, inadequate insect and rodent control.

Parasitic infection, especially those of the skin are frequent among the farm population as they customarily work bare-legged in the rice paddies. Intestinal parasite infestation is probably about 100 per cent throughout the population of Japan.

THE TREND—EASTWARD OR WESTWARD?

As is well known, before the war Japan was definitely anti-western, while she was and is the most advanced of the Oriental nations there were many western ideas and practices she did not respect, including international trade-marks or copyrights.

There appeared to be nothing the western nations manufactured but what Japan could produce more cheaply and usually inferiorly. Now, in her effort to survive, Japan again has commenced exporting copies and cheap imitations of the products of other countries such as china, pottery, toys, bicycles and cigarette lighters. In 1950 the value of Japanese exports was about four times as great as that of 1947. To the credit of leading Japanese industrialists, it should be noted that they are endeavoring to abolish such practices.

Australia and the Phillippines are particularly skeptical of Japan's good intentions, important representatives of those countries have stated openly that a rearmed Japan will not fight on behalf of the western world. Hence the reluctance of those countries to participate in the Peace Treaty, whereas America wants Japan to become a self-supporting and self-defended nation, so as to be relieved of Japan's present economic burden.

It would be too much to expect that a few years of inculcation of democratic ideals could overcome centuries of tradition. Personal contact with the Japanese people leaves two definite impressions; first the younger generations are friendly and cooperative, eager and anxious to learn, and unless other pressures become exceedingly great they will carry themselves and Japan forward; second, the older generations, as would be expected, will not readily give up their traditional modes of living, manner of education or social system.

However, whether or not Japan becomes a democracy in the true sense of the word, and regardless of the defects and criticisms of the Occupation, the latter has developed great good will for the United States, especially and it is quite unlikely any group will be able to incite the Japanese people to the extent they will even consider a second armed conflict with our country. The Communists are the ones raising the old cries "Asia for Asians," and "Go Home American Pigs," etc., the usual outbursts of that irresponsible minority, and they will soon receive appropriate attention by Japanese authorities. We must extend sympathetic understanding and the necessary aid to Japan as a whole.

At present in some respect's Japan's trend is Eastward. If the democratization of Japan should fail, we cannot attribute the failure to the Occupation. Unlike China, which has always venerated scholars, Japan has extolled the Sumarai or warriors; now their young people are eager for knowledge and there is a slowly growing interest in Christianity, while military careers are viewed at least with disdain, if not downright contempt. Japan's Westward trend will depend mostly upon the younger generations and the sympathetic aid with which we help them to overcome their many problems.

VETERANS ADMINISTRATION FUNDS DRASTICALLY REDUCED FOR MEDICAL SERVICES

Funds for the Veterans Home Town Medical Care Program have been drastically reduced for the months of October, November and December, according to Chas. W. Robinson, M.D., Chief of Medical Officer Veterans Administration Regional Office, Oklahoma City, Oklahoma.

"Correspondence from Veterans Administration Central Office, Washington, indicated that there will be no relief in January, February and March 1953," Doctor Robinson said.

"With our limited allotment of funds, it will be imperative that we screen all our treatment cases carefully and authorize only services considered most emergent."

The Chief Medical Officer said the cooperation of physicians in this area has been excellent and it is hoped the doctors will recognize the Veterans Administration's position when in certain cases the amount and type of authorized treatment must be reduced. He recommended that physicians render no treatment to veterans until the request had been approved and authorized by the Veterans Administration unless the delay would endanger the life of the veteran.

Funds for other programs such as, Consultants and Attendings, Veterans' travel, etc., were also sharply reduced. Funds for Private and Contract Hospitalization appear to be sufficient for normal operations.

FERROUS SULPHATE POISONING: REPORT OF A CASE

ARTHUR W. HOYT, M.D.
CHICKASHA, OKLAHOMA

INTRODUCTION

Most of us, in the past, have assumed that medicinal iron preparations are as innocuous as they are prevalent. However, fatal and non-fatal poisoning with Ferrous Sulfate has been the subject of several recent reports in the medical literature. Most of these reports have appeared in British medical journals and in pediatric journals in the United States. The following case is reported here in the hope that many physicians who do not regularly peruse either the pediatric or foreign literature may be made aware of the toxic potentialities of this widely used drug.

CASE REPORT

K. F., a white girl, age 19 months, was admitted to the Chickasha Hospital at 8:00 P.M., March 12, 1952, with complaints of being "drowsy" and "vomiting blood." She had been entirely well until about three hours prior to admission when she complained of her stomach hurting and became listless. One-half hour after onset of these complaints, she was offered her supper, refused most of it except a small amount of tomato soup, and immediately thereafter began to vomit large amounts of watery, red tinged material. Vomiting occurred approximately every 15 to 30 minutes up to time of admission to the hospital, and she became rapidly more drowsy. Her parents, alarmed by the first emesis, took her at once to their family doctor who referred her to the hospital for admission because of her obviously serious condition aptly described by him as "shocklike" and "collapse."

On examination the baby was noted to be well nourished and within normal limits of size for her age. She appeared to be critically ill: Temperature 96.8 (rectal), semi-comatose, very pale, respiring normally, arousing only to vomit copious amounts of watery, pink tinged material with some strings of mucus and a few clumps of spongy, brown material. Her skin was cool and dry and there was no cyanosis. Increased peristaltic sounds were present all over the abdomen, which was not distended. Muscle tonus was generally decreased; tendon reflexes were decreased in amplitude and bilaterally equal. There was no remarkable odor on her breath. Blood pressure was not recorded.

While a catheterized urine and the vomitus were being checked laboratorywise, the neck, chest and abdomen were hastily viewed under fluoroscope, but no radio-opaque foreign body was seen. Under repeated questioning the father at this time recalled that his wife had missed some "big, brown, round, iron tablets" which she had been taking for anemia. Coincident with the father's recollection, the laboratory reported that the child's urine was normal while her vomitus which was negative for blood microscopically and chemically (Benzidine), was positive for iron (Prussian Blue Test.) A hurried call to the patient's home confirmed the absence of ten pills from a box labeled "Ferrous Sulfate" which was found where the child had dropped it.

Since it was now apparent that the patient was suffering from acute Ferrous Sulfate poisoning, her stomach was lavaged with tap water, until the return was clear and colorless. Despite her semi-comatose state she gagged readily, and it was felt that danger of aspiration was negligible. She was then placed in bed with external heat, and an I. V. infusion of five per cent glucose in water started. Three hours after admission (six hours after onset of symptoms) she passed a soft, tarry, black stool which was Benzidine negative, but positive for iron; no RBC's were present on microscopic examination. Shortly after this she became restless, cried occasionally, and her body temperature rose to 100.6 (rectal). Since neither vomitus nor stools contained blood, and since signs of shock disappeared about eight hours after onset, transfusion was not attempted.

The remainder of the patient's course was one of steady improvement. Relapse following initial improvement, as noted in some cases reported previously by others, did not

materialize. The baby vomited a small amount of clear fluid, one time, 16 hours after her admission lavage. She passed a second tarry stool 15 hours after admission. A repeat urinalysis on the second hospital day was normal. Blood count twelve hours after admission was normal except for hemoglobin of 8.4 gms. with RBC of 5.6 million and marked hypochromasia of RBC's on smear. It was felt that this was due to dietary inadequacy prior to her present illness. No other laboratory procedures were done. She was discharged apparently well, 36 hours after admission, and was reported by her family physician to be well one week later, after which she moved from the community and further contact with her was lost.

DISCUSSION

The symptoms, signs and course of this case are not remarkedly different from those previously reported by others except that the vomitus and stools disclosed no blood, either microscopically or chemically, despite their suggestive color. It is assumed that the initial color of the vomitus was derived from coloring used in the coating of the tablets. The manufacturer of the tablets could not be ascertained however, so this explanation remains a conjecture. A second and less likely explanation might be that the baby ate tomato soup shortly before onset of the vomiting. By hindsight, aided by reviewing the cases reported in the articles both here and abroad, it is obvious that this child might well have been given either blood or blood plasma in lieu of dextrose in water. Recovery was probably due to her inherent stamina and the fact that emeses and gastric lavage reduced the poison to a smaller dose than would be fatal for one of her age and weight. Nevertheless, her appearance and symptoms were most alarming.

It is worthy of emphasis that with the relative numerical decline in other causes of death of young children, accidental death, including poisoning, has assumed prominence among causes of death in this age group in recent years. Therefore, it follows that poisoning with Ferrous Sulfate should be more widely known to the medical profession, and steps taken to prevent its occurrence. As suggested recently in an editorial in the *Journal of the American Medical Association*,[10] the druggist should be encouraged to do his share by labeling precautions, and the prescribing physician should be careful to admonish his patients of the dire consequences which can follow ingestion of Ferrous Sulfate by children of the toddling and exploring age group.

SUMMARY

A non-fatal case of acute poisoning by Ferrous Sulfate in a 19 month old baby is reported. It is suggested that the possibility of poisoning by this widely used drug should be more generally known to physicians, and that physicians and druggists alike should take steps to prevent its occurrence.

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Vote November 4th

CLINICAL PATHOLOGIC CONFERENCE

The University of Oklahoma School of Medicine
Presented by the Departments of Pathology and Medicine
HOWARD C. HOPPS, M.D., AND ROBERT H. BAYLEY, M.D.

DOCTOR HOPPS: The following protocol represents all pertinent material available in this case up to the time of the patient's death. Doctor Bayley will base his discussion upon the factual material alone and without additional knowledge of the case.

PROTOCOL

PATIENT: J. H. H., 79 year white male. Admitted 11-8-47. Died 1-4-48.

PRESENT ILLNESS: This 79 year white male was first seen in the Admitting Clinic on November 3, 1947, complaining chiefly of pain in the right lumbar region and drainage from a stump of the left forearm which followed amputation of the hand and wrist one month previously. The back pain was "dull and aching" in character, aggravated by walking or standing and relieved with rest. It had become progressively worse since its onset one month previously. The difficulty in the left hand had commenced three years ago with redness and swelling of the joints. Incision and drainage was followed by increasing disability and drainage until one month ago his local doctor stated that amputation was necessary because "the bones of several fingers had rotted away to the wrist." Before hospital admission the patient was seen in OPD where a urological consultation reported grade I enlargement of the prostate—not clinically malignant. The acid phosphatase was 4.3 (normal 1.5-4). He was also seen in Orthopedic Surgery Clinic where a "metastatic lesion of the spine" was suggested.

PHYSICAL EXAMINATION: Upon hospital admission physical examination revealed BP 150/82, P. 72, R. 14. Arcus senilis was present. The mouth was edentulous. The heart was said to be not enlarged. A soft blowing systolic murmur was present at the apex. Occasional extrasystoles were present. Lungs were clear. The abdomen was negative. The left forearm stump showed drainage and fixation of skin to the distal end of the ulna. The terminal phalanx of the right index finger was missing (lost in an accident 20 years previously). The back exhibited tenderness to deep pressure over the right costovertebral angle and tapping the eleventh thoracic spine caused radicular type pain. The prostate exhibited 3+ enlargement, considered to represent hypertrophy.

LABORATORY DATA: Urinalysis on admission was negative except for occasional granular cast; one month later it was negative. Routine blood study revealed Hb. 13 gm. per cent, RBC's 4 million, WBC's 13,200, with 87 per cent polys, 10 per cent lymphs, and 2 per cent monocytes. The Mazzini, Kahn, Kline and Kolmer were 4+ on several occasions. Chest x-ray was reported "Heart shadow within normal limits. Both costophrenic angles are free. Lower half of both lung fields show rather marked infiltrative changes. Spot film over T-10 shows collapse of the body as previously described (OPD). Pelvis and hips show no evidence of any bone or joint pathology. Impression: Pulmonary metastasis. Please furnish clinical data for reason of removal of hand." A later chest x-ray suggested basal, bilateral bronchiectasis.

CLINICAL COURSE: On November 11, 1947, the patient was admitted to the hospital on Radiology Service. A telephone consultation with his local physician revealed that the amputation specimen showed only osteomyelitis (the specimen was not examined by a pathologist) and at that time the blood serology was 3+.

In view of the possibility of "tertiary syphilis of bone" a course of 5 million units of penicillin was given. Dermatological consultation on 11-12-47 resulted in the recommendation of "a spinal fluid Wassermann and protection against a Herxheimer in the aorta by small doses of penicillin (5,000 units every three hours for 2-3 days before starting full doses)."

Penicillin was started on 11-16-47 with two initial doses of 50,000 units q.i.d. and then decreased to 5,000 units for four days, with increase to 50,000 units q.i.d. for the next 11 days. The back pain became progressively worse. The spinal fluid was negative.

On 12-4-47 a biopsy of the stump disclosed granulation tissue, acute and chronic inflammation—non-specific.

On 12-13-47 neurosurgical consultation confirmed the destructive lesion of T-10 and T-11 with encroachment on the foramina. They recommended spinal fluid examination with Queckenstedt. Eleven days later the spinal puncture revealed complete block. The protein of the fluid, previously 40 mg. per cent, had increased to 110 per cent. The surgar was 66 mg. per cent. The sedimentation rate at this time was 60 mm. in one hour.

Two days after discovery of complete block another neurosurgical consultation disclosed a sensory level to T-10 and laminectomy was considered necessary. The diagnosis "Tuberculous spondylitis" or "Metastatic malignancy" was considered.

On 12-30-47 operation was performed. The cord appeared to be in good condition. Anterior to the cord a "gray semi-encapsulated mass" was observed together with "evidence of destruction of the vertebral body." Grayish material was aspirated and necrotic tissue removed. The dura was not opened. Microscopic study revealed "fragments of osseous tissue and cartilage with necrosis."

Two days after operation abdominal distention developed and Wangensteen suction was started. By the end of the third postoperative day the patient had received 4,000 cc. of fluids parenterally, 3,000 of which were glucose and saline and 1,000 of which was amigen. At this time the pulse was found to be "fast and irregular." Internal Medicine consultation on 1-3-48 disclosed "auricular fibrillation with fast ventricular rate; recommendations were papaverine for chest pain and withhold parenteral fluids for some time." The temperature, previously normal, rose to 100°F. two days before death. Death occurred on 1-4-48.

CLINICAL DIAGNOSIS

DOCTOR BAYLEY: Since you have all had an opportunity to read this, I will not reread it, but merely summarize what I consider to be the most pertinent points. This 79 year old man, rather obviously ill with his back-chest pain, was considered to have an organic lesion of the spine. Since the interpretation of x-rays is so important in this case I'll ask Doctor Bender if he will show us the x-rays of the spine first.

DOCTOR BENDER: From these films alone we can't differentiate with certainty between a malignant invasion of the spine, and an infectious process of some type, although the slight fusiform swelling apparent in the para spinal shadow points a little more toward an infectious etiology.

DOCTOR BAYLEY: You are speaking of the shadow seen here—the sort of thing very commonly seen in Pott's type of abscess?

DOCTOR BENDER: That's right.

DOCTOR BAYLEY: The lack of vertebral collapse with kyphosis would be against tuberculosis, would it not — or isn't there enough destruction for this to have occurred yet?

DOCTOR BENDER: The destruction has not progressed to that extent yet.

DOCTOR BAYLEY: According to this patient's history he had a chronic lesion which finally, a month before hospitalization, required amputation well up the arm. This is an unusual event and the clinicians here were apparently very much concerned as to whether or not the hand was removed for some specific lesion, such as a neoplasm or infectious granuloma. The patient's local physician described the lesion as an infectious one and said that the patient had a 3+ serologic reaction for syphilis. To complicate the situation further, the chest x-ray revealed infiltrative changes. Perhaps Doctor Lachman would give additional interpretation to that furnished in the protocol?

DOCTOR LACHMAN: Commenting upon the spine films first, I think it significant that there is partial destruction of the intervertebral disc between T-10 and T-11, which would be very uncommon as a result of tumor metastasis. Furthermore, we have the paraspinal soft tissue shadow which Doctor Bender described. A paraspinal shadow of that size would hardly ever occur in a metastasis. It is usually due to an infectious process, an abscess. In rare cases this type change may result from a primary tumor. As far as lung lesions are concerned, they are not specific. I don't believe that we should try to make a diagnosis from these without further clinical information. It's interesting that the process does not involve the upper lobe on either side—that the infiltrations are confined mainly to the lower lung regions, which makes one think of bronchiectasis. Certainly, in a patient of this age, tuberculosis could not be ruled out from this film. Carcinomatosis also could not be excluded from this x-ray.

DOCTOR BAYLEY: I think now we have all the objective data which we can get on this

case. If we recall that tuberculosis has an increasing incidence in men of 60 years and older, we must consider tuberculosis of the lungs here. Certainly this involvement of the spine, with the paraspinal shadow, is quite characteristic of Pott's disease. We have the old adage that we respect, namely that we should make one diagnosis if possible which will cover all the various lesions. If we choose syphilis as our diagnosis we will have a great deal of difficulty in explaining this chest picture. I do not believe that the occasional uncommon syphilitic lesion of the lungs would explain this chest picture. The process is quite rare—multiple gumma of the lungs and, so far as I know, this picture doesn't resemble it. Therefore, if we choose luetic infection of the spine we will have to make an additional diagnosis to explain the pulmonary condition, such as bronchiestasis. Either tuberculosis or syphilis could have produced the "infectious" process which led to amputation of the patient's left hand. There is still the possibility of a neoplastic lesion, either primary in the lungs, with metastasis to the spine, or secondary in both the lungs and the spine. The evidence is against it being primary in the spine.

In my opinion, this patient had tertiary syphilis and had failure of healing of an infectious process in his left hand because of his tertiary syphilis. It is very common for infections of various etiologies, particularly those involving bone, to exhibit failure of healing in the presence of late syphilis. The hand lesion might have even begun as a tertiary luetic lesion. I believe also that this man had syphilitic disease of his spine represented by a gummatous lesion involving and destroying the bodies of two vertebrae and the cartilage between them and then developed an abscess, a posterior mediastinal abscess. To me, the chest films had an appearance of cystic change. Cystic change commonly results in the lungs secondary to infection, and I believe that this man had a bilateral basilar bronchiectasis, with cystic changes superimposed. The question arises as to why this man had no respiratory symptoms. He had no cough nor sputum at the time of admission, but we know that people with bronchiectasis are frequently asymptomatic for many months or even several years at a time until they get a superimposed respiratory infection, attended by a bronchopneumonic process in the region of the bronchiectasis. During these bouts the patient is sick and does raise sputum. As this clears up, with adequate drainage by cough, the whole thing subsides and the patient may be quite asymptomatic. At this stage one can listen over the lungs and not hear any rales, so that the negative clinical picture at time of hospital admission, as regards respiratory infection, does not exclude bronchiectasis with cystic changes in the lungs. I still can't be sure that this man doesn't have tuberculosis of the spine; that's a fairly typical picture of a Pott's abscess, extending up and down the posterior mediastinum. A biopsy was taken at operation, as you recall, and the report was made simply of necrotic material. This implies absence of changes specific for tuberculosis, syphilis, or neoplasm and doesn't help us a bit.

If this man did have syphilis of the spine, and began to get specific treatment, one might expect a flare up in the tertiary lesions which could aggravate the symptoms. You will recall that this man did receive a course of penicillin following which his pain got worse and a sensory level developed which necesitated laminectomy. This clinical observation supports the idea that he had a luetic lesion of the spine.

CLINICAL DISCUSSION

QUESTION: Isn't Pott's disease rather rare in adults?

DOCTOR BAYLEY: I don't know the incidence of Pott's disease in adults. I have seen Pott's disease in a few adults, in a 15 year period of clinical experience,—I think I could count them on my two hands. I wouldn't say that the patient's age excluded this. The vast majority of Pott's disease occurs in young people under 30, mostly in young children.

QUESTION: Do you think that the patient's hand lesion was directly related to syphilis?

DOCTOR BAYLEY: Well, yes, but perhaps it wasn't necessarily luetic to begin with; he could have had an injury to his hand. Once a nonspecific infection got started, then failure to heal could be explained as a complication of late syphilis. Tuberculosis of the hand occasionally occurs, with a destructive granulomatous process of the bone.

PATHOLOGIC DIAGNOSIS

DOCTOR HOPPS: At autopsy the patient was quite malnourished, a fact that I don't think has been emphasized. He had but 0.2

cm. adipose tissue in the abdominal wall in the midline. His abdominal cavity contained approximately 350 cc. of a pale green purulent material. That was the only remarkable thing. The liver wasn't enlarged; it was in its usual position. The gallbladder was essentially normal. The stomach and intestines were not abnormal. The spleen was of usual size and position. When the pleural cavity was opened there were found rather extensive pleural adhesions and the inter-lobar fissures, in both lungs, were obliterated by fibrous tissue. There were multiple small lesions in the upper lobe of both lungs, lesions which felt shotty against a background of considerable fibrosis. This fibroic process involved the mid-portion of the lungs, to slightly greater extent. Peribronchial lymph nodes were moderately enlarged. One of two of the larger nodules in the lungs exhibited central caseous necrosis. The heart was essentially normal in size and appearance. Gross examination of the chambers and of the cusps revealed no significant abnormality. The aortic valve orifice was not increased in circumference as might have been expected if there had been syphilitic aortitis, nor were there any gross changes to suggest syphilitic aortitis. Examination of the vertebral column revealed this destruction and collapse of vertebrae as has already been described. These vertebral bodies were largely converted to soft caseous material. Paravertebrally there was the fluctuant abscess which produced the fusiform swelling described in the x-rays. Although there was no direct communication apparent between this paravertebral abscess and the peritoneal cavity, there was considerable fibrous reaction in this region and the inflammatory reaction in the peritoneum seemed to be most severe there. It appeared that this was probably the source of the infectious process of the peritoneum. Now, from these gross findings we were not at all certain as to the essential nature of this condition. The picture was that of a granulomatous reaction and we considered the possibility that this might be luetic, although the absence of aortic changes was against it. Because we could not be sure of the diagnosis we made quick frozen sections and this disclosed the true nature of the infectious granuloma; it was tuberculous. The tuberculosis was more of exudative form with recent extensive necrosis that hadn't led to complete caseation. There were very few Langhan's type giant cells. We made acid fast stains from sections of lung and were able to demonstrate tubercle bacilli, so that our final etiologic diagnosis in this case doesn't rest upon shaky ground, as is sometimes the case when we try to differentiate gummatous lesions from tuberculous lesions on the basis of histologic appearances alone.

Returning to the gross findings, the right lung weighed 700 gm., and the left 550 gm.; there wasn't much edema. Most of this increase in weight was due to fibrous tissue and this was a reaction of fibroid tuberculosis, with exacerbation. I strongly suspect that this was a case of endogenous exacerbation, or reinfection if you like.

Examination of the other viscera revealed little change of interest to us. There was no evidence of wide dissemination of tubercle bacilli with miliary tuberculosis, etc., although we were able to demonstrate microscopically a few small tubercles in the sleen and one caseonodular tubercle 0.5 cm. in diameter in the suprarenal gland. Terminally, apparently there was a dissemination of these organisms, but this person did not manifest hematogenous miliary tuberculosis.

Our final pathologic diagnosis was:

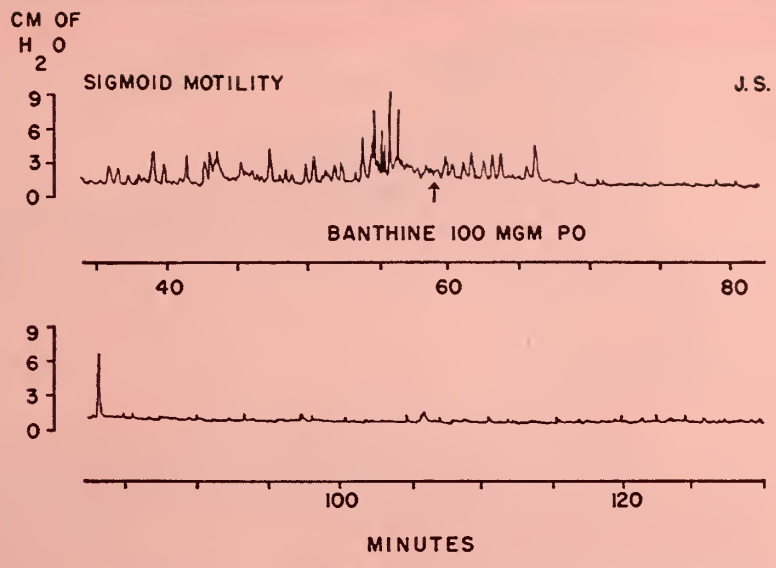
- Pulmonary tuberculosis, fibroplastic, fibrocaseous and caseonodular
- Pleural adhesions, fibrous, bilateral
- Spondylitis, caseous, tuberculous, involving D-10 and 11
- Tubercles, caseonodular in spleen and suprarenal gland
- Peritonitis, acute, suppurative
- Chronic passive congestion of liver and spleen
- Retention cyst of right kidney
- Atherosclerosis of aorta, slight
- Syphilis (clinical diagnosis based on 4+ Wassermann)
- Recent postoperative state, 5 days following laminectomy
- Amputation stump, old, left forearm
- Emaciation

DISCUSSION

QUESTION: Was the peritonitis tuberculous?

DOCTOR HOPPS: The peritonitis was produced by a pyogenic organism. It was probably on a basis of secondary infection, possibly in relation to the paravertebral abscess. The peritonitis was primarily suppurative and rather acute.

(Continued on page 400)



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RESEARCH IN THE SERVICE OF MEDICINE **SEARLE**

President's Page

On entering an elevator recently, I noticed that the young woman at the controls was visibly agitated. The object of her concern was an elderly blind man who had just left the cage. He had already bumped into a pillar and was heading for a stairway and probable serious injury. He had no guide, cane or seeing-eye dog.

On the way up the girl said, "He lives here and has been blind for years, won't accept assistance, won't even admit his condition, even to himself, too proud." If I ever saw a text, that was it.

However dark his physical world had become, he was no less illuminated in his mind and soul. False pride goeth before destruction and a haughty spirit before a fall and there are none so blind as they who will not see.

There is no profit to us in medicine to close our eyes to our handicaps and shortcoming and I fear we have a few of each. Rather should we be on the alert to discover them ourselves rather than to have them pointed out to us and then to welcome all assistance from whatever quarter.

One big blind spot that continues to harass the profession is the propagation of feuds and jealousies. Anyone can get mad but only a child or an imbecile deliberately fans the flames of dissention. False pride is the chief urge that pushes a physician into undertakings for which he is not equipped, to the hurt of himself, his patient and the profession. A successful doctor was asked recently the secret of his success and he replied, "Knowing what I could not do." May his tribe increase.

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CURRENT ACTIVITIES AT THE OKLAHOMA MEDICAL RESEARCH FOUNDATION



This is the twelfth in a series on the current activities of the Oklahoma Medical Research Foundation. The purpose of this article is to describe some of the community, state, and national medical and research activities of certain members of the Staff.

The administrative and scientific personnel of the Oklahoma Medical Research Foundation have a dual function. They conduct the administrative and scientific activities of the Research Institute, the Research Hospital, and the Research Foundation Sanitarium, and they take part also in the activities of the community, state, and national medical and research programs. Not only is their experience of assistance to these extramural programs, but from these activities they derive increasing experience which enables them to deal more effectively and efficiently with the problems of the program of the Research Foundation.

The individual with the greatest variety of activities is Mr. Hugh G. Payne, General Manager of the Foundation. He participates in several other important activities. Mr. Payne is the Executive Secretary of the Alumni Association of the University of Oklahoma School of Medicine, and in this capacity he is responsible for initiating the major part of the activities of this Association. Since the Alumni Association is dedicated to the development of a strong medical center involving not only the School of Medicine, the University Hospital, the affiliated Hospitals, and the Veterans Hospital, but also the Foundation, Mr. Payne is, in a larger sense, thus serving the objectives of the Oklahoma Medical Research Foundation. The Alumni Association is able to render valuable assistance to the Dean of the School of Medicine, and to the President of the University in problems having to do with legislation which directly or indirectly affect the welfare of all of the allied institutions mentioned. The Alumni Association initiated and took the lead in the legislation to provide the Medical School and the University Hospital with additional space and facilities. The headquarters of the Alumni Association are in the Research Institute Building.

In 1949 Mr. Payne assisted in the organization of the Oklahoma State Heart Association which is affiliated with the American Heart Association. Mr. Payne serves as Executive Secretary of the Oklahoma State Heart Association, and in this capacity is responsible for directing the annual fund-raising campaigns, and supervising the programs of the Association. The Heart Association staff is housed in the Research Institute Building. The State Heart Association through annual campaigns serves the dual purpose of furnishing money for research on heart and cardiovascular disease, and supporting programs for professional and lay education and community service in these fields.

In addition Mr. Payne is the Executive Secretary of the Oklahoma Chapter of the Arthritis and Rheumatism Foundation. Two mail campaigns have been conducted for this group as annual fund-raising activities. It is planned to make this chapter an integral part of the volunteer health groups which are going organized.

At a national level, Mr. Payne is one of the six lay members of the National Advisory Cancer Council. This Council has, in addition, six professional members. The Council is the final authority in the allocation of grants-in-aid for research projects dealing with the field of cancer which are supported by the National Cancer Institute. In this capacity, Mr. Payne participates in meetings in Washington three times annually, and occasionally visits research instituntes throughout the nation to observe their facilities for research dealing with cancer. His experience at the Foundation makes him a valuable member of the Council, and at the same time his experience in the Council add considerably to his value to the Foundation.

Dr. Edward C. Reifenstein, Jr., the Director of Research of the Oklahoma Medical Research Foundation, likewise participates in a number of national activities which provide valuable experience for him in connection with his activities in the Foundation. He is a member of the Committee on Therapeutic Nutrition, Food and Nutrition Board, National Research Council, in which he has participated for two years. The Committee has met once to twice annually in Washington, and has revised the manual on therapeutic nutrition in military problems; this manual is a handbook for the armed services.

Doctor Reifenstein is a member of the National Committee on Cancer Diagnosis and Therapy, a sub-committee of the Division of Medical Sciences, the National Research Council. This group which meets in Washington three times annually, is an advisory group to several sponsoring agencies. These include the American Medical Association, the Federal Food and Drug Administration, the American Cancer Society, the National Research Council, the Damon Runyon Memorial Fund, the National Cancer Institute, all of which are concerned with proposed ''cures'' and suggested ''treatments'' for cancer. The Committee reviews problems submittd by the sponsors and recommends on the merit or the need for further study of the proposals.

Doctor Reifenstein also is a member of the Metabolism and Nutrition Study Section, the National Institutes of Health, an appointment lasting for four years. The Section meets in Washington three times annually and reviews the applications in these fields submitted to the National Institutes of Health for grant-in-aid support.

Since 1942, Dr. Reifenstein has been the Secretary of a series of conferences held under the auspices of th Josiah Macy, Jr. Foundation, New York City. At first these conferences convened several times a year, but more recently they have been held annually. The present series, the Conferences on Metabolic Interrelations, will have its fifth meeting in Jannary, 1953. In addition, he is the Editor of the Transactions of these Conferences. Seventeen Transactions were published by the Macy Foundation in the first series of conferences, and five will be published in the second series. The recent Conferences have been concerned with the problms of calcification of bone. In addition, Doctor Reifenstein is a Consultant in Endocrinology for the journal, *G.P.*, and for the journal, *Postgraduate Medicine*.

Since 1945, Dr. Reifenstein has been a member of the Committee on Arrangements of the Laurentian Hormone Conference. This gronp of six members annually conducts an invitation conference for about 165 scientists in the field of endocrinology. This activity provides valuable contacts with the leaders in Endo-

crinology. In addition, he has served on the nominating committee of the Endocrine Society and has recently been elected to the Council of this Society. Furthermore, he is Chairman of the 1952 Postgraduate Assembly of this organization, which will be held in Miami, Florida, November, 1952. A faculty of 20 outstanding endocrinologists will give in one week, 64 lectures, and approximately 175 to 200 graduate physicians who are interested in additional training will attend. Doctor Reifenstein is a member of the recently organized Study Group on Metabolic Disease, Sub-committee of Steroids and Hormones, Committee on Research, the Council on Pharmacy and Chemistry, the American Medical Association. Dr. Charles D. Kochakian of the Research Institute Staff also serves as a member of a Screening Committee of this Sub-committee on Steroids and Hormones.

Doctor Kochakian, Associate Director of the Research Institute has participated in many important national activities. He served in 1946 as an Advisory Associate of the Roscoe B. Jackson Memorial Laboratory, Bar Harbor, Maine. In 1949, he was a member of the Panel on Hormones, Committee on Growth, the National Research Council. In the same year, Doctor Kochakian served on the Panel of Appraisers of the *Handbook on Biological Data*, the American Institute of Biological Science.

Doctor Kochakian was Chairman of the Section on Steroid Biochemistry for the Second National Cancer Conference held in March, 1952. He arranged the entire program for this Section. Dr. Leonard P. Eliel of the Research Institute Staff was the secretary of the program committee for this section.

The members of the scientific staff of the Foundation frequently are requested to participate as speakers in Regional and National meetings. This indicates their standing as authorities in their respective fields. The activities outlined above provide the staff members of the Foundation with constant and mutually advantageous contacts with scientists, and medical research administrators throughout the world.

A.M.A. CLINICAL SESSION TO HAVE WIDE APPEAL

A program designed to appeal to the general practitioner and the specialist alike has been prepared for the sixth annual Clinical Session of the American Medical Association in Denver, December 2-5, according to Dr. Ernest B. Howard of Chicago, assistant secretary.

"There will be practical clinical discussions, scientific exhibits, color television, general lectures on basic problems, technical exhibits and instructive films," Dr. Howard said. "These will provide a practical postgraduate study.

"Therapy will be stressed in a broad presentation of clinical studies on the problems met in daily practice. The scientific exhibits will be coordinated with the material presented in the clinical sessions."

The entire scientific phase of the meeting will be presented in Denver's new Municipal Auditorium. There will be more than 200 papers delivered by outstanding men in all branches of medicine. The general devisions will be obstetrics, pediatrics, diseases of the chest, cardiovascular diseases, neurology and psychiatry, fluid balance and kidney problems, traumatic surgery, and medical therapy.

Migraine In Children

"Migraine may appear during the first years of life. The presence of subjective signs, such as headache and flimmer scotoma, is often difficult to determine in young children. The true nature of the symptoms frequently remains obscure for years."

Vahlquist, B. and Hackzell, G.: Acta Paediatrica *38*: 622 (1949).

NO. OF CASES	SEX	AGE AT ONSET	CYCLIC VOMITING	DURATION OF ATTACK	INTENSITY
31	8 ♀ 23 ♂	3 yrs. (mean)	3 out of 31	2½ hrs.	severe in all cases

TABLE CONT'D

NO. OF CASES	UNILATERAL HEADACHE	NAUSEA	FLIMMER SCOTOMA	VERTIGO	HEREDITY
31	18 out of 31	31 out of 31	12 out of 31	6 out of 31	20 out of 31

(reference given above)

In a study of 400 adult migraine patients, it was revealed that 34% had suffered attacks before the age of 15.* These investigators concluded that childhood migraine was a much greater clinical problem than was previously believed and that psychodynamic mechanisms played an important part in the disease.

These criteria are useful in diagnosis:

Headache attacks with symptom-free intervals plus (at least two of the following) nausea, scintillating scotoma, hemicrania, and hereditary predisposition.

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In the adolescent age group, 12 to 18 years of age, the dosage may gradually be increased as necessary up to the usual adult dose, i.e., two tablets when the attack appears imminent followed by one tablet doses at half hour intervals until the attack is aborted. *(Total maximum dose for adults: six tablets for each attack.)*

*Katz, J., Friedman, A.P., and Gisolfi, A.: New York State J. Med. *50*: 2269 (Oct.) 1950.

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ACTIVITIES OF THE OKLAHOMA CHAPTER OF THE S. A. M. A.

LAWRENCE MCHENRY

The activities of the past year began with an informal dinner sponsored by the Public Policy Committee of the State Medical Association. The President and the President-Elect of the State Association, along with other members of the Public Policy Committee, gave short talks to the students concerning the general organization and function of the State and County Associations. This get-together with the State Association was a great success and demonstrated the possibilities for a closer working relationship between the Student organization and the State Association.

The guest speaker at the second meeting of the Local Chapter was Mr. Dick Graham, Executive Secretary of the State Medical Association. Mr. Graham gave a very enlightening and informative talk on the potentialities of the practice of medicine in the state of Oklahoma. The students were pleased to hear of the opportunities offered the young doctor in the smaller communities.

At the next meeting, Edwin Fair, M.D., gave a very interesting and educational talk on the role of the physician in pre-marital counseling. This subject which is becoming more and more important every day was discussed at length among the students. Doctor Fair, in his excellent presentation, cast a light on the real necessity for the practicing physician to become more familiar with his increasing duties.

The subject, "How to set up a medical practice," and the election of officers were the topics of the final meeting of the year. The problem of setting up a practice was discussed from three different viewpoints. First, Elmer Ridgeway, M.D. spoke of opening a general practice in a large city such as Oklahoma City. H. V. L. Sapper, M.D., discussed the problems in beginning a specialty practice in the city. The final viewpoint, setting up a general practice in a small town, was exceedingly well handled by Ethan Walker, M.D. from Yukon. The presentation of this situation from the three different aspects revealed the problems which each physician must face in beginning his actual career. The three speakers discussed the problem in a very straight-forward manner, leaving the students with a better understanding of what they will have to face someday.

The officers for this year were chosen and are: Tom Moore, Cleveland, Okla. Third Year Student, as President; Lawrence McHenry, Oklahoma City, Second Year Student, as Vice-President; Jake Jones, Shawnee, Third Year Student, as Secretary; and Bob Stover, Cardin, Fourth Year Student, as Treasurer. The new president, Tom Moore, extended the appreciation of the entire chapter to Mr. William Denny, Guthrie, Fourth Year Student, for his outstanding job of administration in the first year of activities of the Oklahoma Chapter of the S.A.M.A.

Although there were not a great number of programs during the past year, the ones that were presented met with great favor on the part of the students. This was manifested by the various comments and a progressively increasing attendance. Again our organization would like to thank the State Association and Medical School Administration for their cooperation. Through this close cooperation the officers of the chapter can provide both informative and entertaining programs for the students.

BOOK REVIEW

PRINCIPLES AND PRACTICE OF OBSTETRICS.

J. P. Greenhill, M.D. W. B. Saunders Company, Philadelphia and London. Tenth edition with 1140 illustrations on 864 figures, 194 in color. 1951. $12.00.

Doctor Greenhill has enlisted the aid of many authorities in compiling the material for his tenth edition in which he takes a personal satisfaction. Not a single page remains as it was in the last edition and the arrangement of the book has been changed somewhat. The book is divided into seven sections with illustrations, some of which are in color. One of the latest editions pertaining to obstetrics, its chapters cover the Physiology of Reproduction, Pregnancy, Labor and the Puerperium and The Pathology of Pregnancy, Labor and the Puerperium.

The chapter on Ectopic Pregnancy explains that the occurrence of ectopic pregnancies is more frequent in women past their 30th year, frequently after they have experienced a long period of relative sterility, and in women who have had an antecedent pelvic disease. Many instances of rupture of the sac or tubal abortion with spontaneous recovery undoubtedly occur and are diagnosed as appendicitis.

There is possible disagreement with the author in his chapter on Infectious Diseases in which it is stated that an abortion is justified if German measles develop during the first three months of pregnancy.

The usual obstetrical care at every stage is detailed, beginning with immediate treatment of various difficulties, prevention of accident and infection, operative intervention, relief of discomfort, and many other aids.

Among the most interesting material is the chapter on Fetal Erythroblastosis and the RH Factor. Doctor Greenhill writes that no hard and fast rules can be laid down when advising a therapeutic abortion when past obsterical history and results of antibody studies, including those for the husband's homozygosity, indicate the probability of another disaster.

The book is well illustrated, well written and a ready handbook for clinician or practitioner.—J. R. McLauchlin, M.D.

CLINICAL PATHOLOGIC CONFERENCE

(Continued from page 394)

QUESTION: Did the amputation stump give evidence of the primary trouble there?

DOCTOR HOPPS: We have no knowledge of that, it was completely healed so far as we can determine, and we were not permitted to study that lesion because of interfering with embalming and the like. I doubt that such study would have contributed anything, because the original lesion was considerably distal to the stump and the amputation healed well.

QUESTION: Did you recover acid fast organisms from the area of spondylitis?

DOCTOR HOPPS: Yes, we made smears from this lesion too. If we hadn't, I think there would be little problem, because the type of reaction there was quite comparable to that which we saw in the lungs.



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HAVE YOU HEARD?

C. Alton Brown, M.D., Oklahoma City, attended the second International Congress of Internal Medicine in London in September. While abroad he also visited Belgium, Switzerland, Germany and France.

C. E. Woodard, M.D., Drumright, attended a recent course at the Cook County Post Graduate School of Medicine in Chicago.

John Simon, M.D., Alva, attended the International College of Surgeons in Chicago.

Three Muskogee physicians, Jack H. Reynolds, M.D., Virgil D. Matthews, M.D. and Virgil B. Gray, M.D. will begin construction of a new clinic building in that city soon.

Lt. Claude W. Garrett, Jr., Tulsa, reported recently to San Antonio, Texas.

Clyde Kernek, M.D., Holdenville, left recently for a year's study in Boston.

Robert Furman, M.D., Oklahoma City, recently gave an account of the operation of the Oklahoma Medical Research Foundation at a meeting of the Enid Kiwanis club.

George H. Niemann, M.D., Ponca City, was the subject of a recent feature story in his home town newspaper in which he related the story of early day medicine in Ponca City.

G. G. Harris, M.D., Helena, was also featured in his home town newspaper recently in a story giving biographical data about him.

Rowe F. Bisbee, M.D., Ada, has been appointed acting director of the Pontotoc County Health Department.

Tom Points, M.D., has recently been released from service and will open his office at 625 N.W. 10th, Oklahoma City. A captain, he was stationed at Ft. Sill.

OBITUARIES

WILLIAM H. KINGMAN, M.D.
1881-1952

William H. Kingman, M.D., pioneer Bartlesville physician, died in a Topeka hospital after several year's illness.

Doctor Kingman was born in Brooklyn in 1881. He attended medical school in Chattanooga, Tenn. and interned in New York after which he went to Lima, Peru as chief surgeon for the Vanderbilt-Hagen and Gould Copper Corp. After four years there, he returned to the U. S. and established his practice in Oklahoma City where he remained four years before coming to Bartlesville in 1910.

Survivors include the widow of the home, two daughters, two sisters and two grandchildren.

J. A. KENNEDY, M.D.
1876-1952

J. A. Kennedy, M.D., died September 12 in an Okmulgee hospital.

Doctor Kennedy was born in Van Buren, Ark., in 1876 and came to Oklahoma before statehood settling near Okemah. He later moved to Mounds and to Okmulgee in 1950. He was graduated from the University of the South, Sewanee, Tenn., in 1900.

Survivors include the widow of the home, one daughter, two sisters and three brothers.

HONORED BY TENNESSEE

Three Oklahoma physicians, William Mitchener, M.D., Okmulgee; Isaac Dalton Walker, M.D., Tonkawa; and Divonis Worten, M.D., Pawhuska, were recently presented golden "T" certificates at the University of Tennessee, in recognition of services rendered in the half-century since their graduation.

A tour of Memphis and luncheon honoring the group preceded the ceremony.

EASTERN OKLAHOMA PHYSICIAN RECEIVES FIFTY-YEAR PIN

An early day Indian Territory physician, John Reynolds, M.D., of Muskogee received a 50-Year Pin in ceremonies September 22, 1952. The pin was presented by Shade Neely, M.D., Muskogee.

Doctor Reynolds received his pin at a meeting of the East Central Oklahoma Society held at the country home of Chas. Ed. White, M.D., Muskogee. Members of the Sebastian County, Arkansas, Medical Society were guests and the scientific program on "Common Lesions of the Skin" was presented by D. W. Goldstein, M.D., Fort Smith.

Born in 1874, at Ashville, North Carolina, the son of a Confederate army captain, Doctor Reynolds had a private tutor until he entered Weaverville College, North Carolina. He studied there two years, later attending the University of North Carolina for two years' pre-medical training. He entered Louisville Medical College (now the University of Kentucky) and graduated in June 1903. Following graduation, he practiced in his home town of Ashville for six months before coming to McAlester, I. T. June 4, 1903, he came to Muskogee.

In 1938, Doctor Reynolds was mayor of Muskogee. He has been a member of Grace Episcopal church for many years and was a charter member of the Muskogee Chamber of Commerce and has been a member of the Elk's Lodge for 30 years. Doctor and Mrs. Reynolds have three children and six grandchildren.

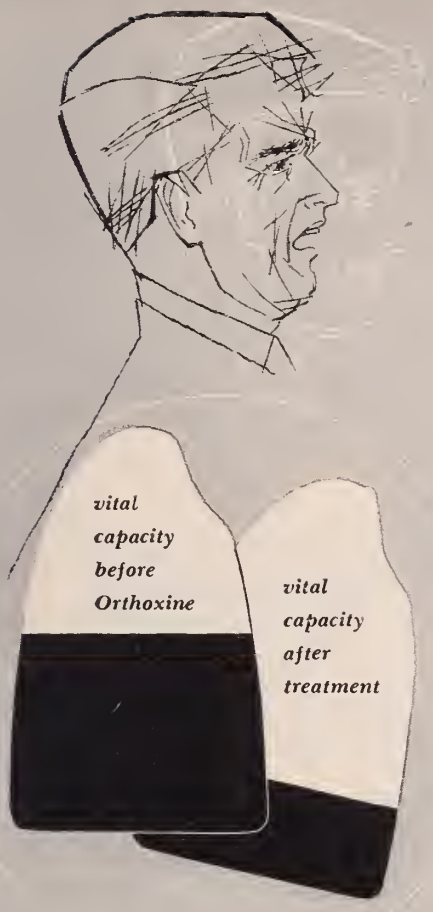
Having 3,000 deliveries on record, Doctor Reynolds states obstetrics is the favorite part of his practice. He lists hunting and fishing and the general practice of medicine as his hobbies.



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ANNOUNCEMENTS

VA COURSE IN PSYCHIATRY AND NEUROLOGY. The Veterans Administration is instituting a four month intensive training course in psychiatry and neurology to fit the needs of physicians without such previous training who are assigned to duty in psychiatric hospitals. Physicians who have been engaged in general practice may request this training upon applying for a position at one of these hospitals. Information and applications may be obtained from the nearest VA Hospital or Regional Office or by writing to the Chief Medical Director, VA Central Office, Washington 25, D. C.

POSTGRADUATE COURSE ON RECENT ADVANCES OF THE CHEST. This course sponsored by the Council on Postgraduate Medical Education and the New York State Chapter of the American College of Chest Physicians, will be presented at the Hotel New Yorker, New York City, November 10-14. Further information can be obtained from the Executive Director, American College of Chest Physicians, 112 East Chestnut Street, Chicago 11, Ill. The course has been approved for credit by the American Academy of General Practice.

FIRST VOLUNTEER RETURNS

Oklahoma's first physician to volunteer for service two years ago has returned and opened his offices for the practice of urology at 912 Medical Arts Building, Oklahoma City. He is A. M. Young, III, M.D.

Doctor Young was first stationed at Percy Jones Army Hospital, Battle Creek, Michigan, and then was sent to the 16th Field Hospital, Nurnberg, Germany, as chief of the urology section. He was also chief of urology at Percy Jones Hospital. Doctor Young was a major in the Service.



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WILLIAM A. ALTEMEIER, M.D., Cincinnati General Hasp.
IRVING AREIL, M.D., Memarial Haspital, New Yark,
ALEXANDER BRUNSCHWIG, M.D., Memarial Haspital, N.Y.
GEORGE CRILE, JR., M.D., Cleveland Clinic.
ORMOND S. CULP M.D., Maya Clinic.
EVERETT I. EVANS, M.D., Medical College af Virginia
FRANK H. GARDNER, M.D., Peter Bent Brigham Haspital.
FRANK L. GERBODE, M.D., Stanford University.
PAUL W. GREELEY, M.D., University af Illinais.
C. HOWARD HATCHER, M.D., University af Chicaga.
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ANNOUNCES COURSES FOR FALL AND WINTER, 1952-1953

SURGERY—Intensive Caurse in Surgical Technic, Two Weeks, starting November 3, January 19, February 2.
Surgical Technic, Surgical Anatomy and Clinical Surgrey, Faur Weeks, starting March 2.
Surgical Anatamy and Clinical Surgery, Twa Weeks, starting March 16.
Surgery af Calan and Rectum, One Week, starting November 17, March 2.
Bronchascapy, One Week, by appaintment.
General Surgery, One Week, starting February 9.
Generol Surgery, Twa Weeks, starting March 30.
Fractures and Traumatic Surgery, Twa Weeks, starting March 2.

GYNECOLOGY—Intensive Caurse, Twa Weeks, starting February 16.
Vaginal Approach to Pelvic Surgery, One Week, starting March 2.

OBSTETRICS—Intensive Caurse, Two Weeks, starting Navember 3, March 2.

MEDICINE—Intensive General Caurse, Twa Weeks, starting May 4.
Gastroscapy and Gasteralagy, Twa Weeks, starting November 3.

UROLOGY—Twa Week Intensive Caurse starting April 27.
Ten-Day Practical Caurse in Cystascapy starting every twa weeks.

DERMATOLOGY—Intensive Caurse, Two Weeks, starting May 4.

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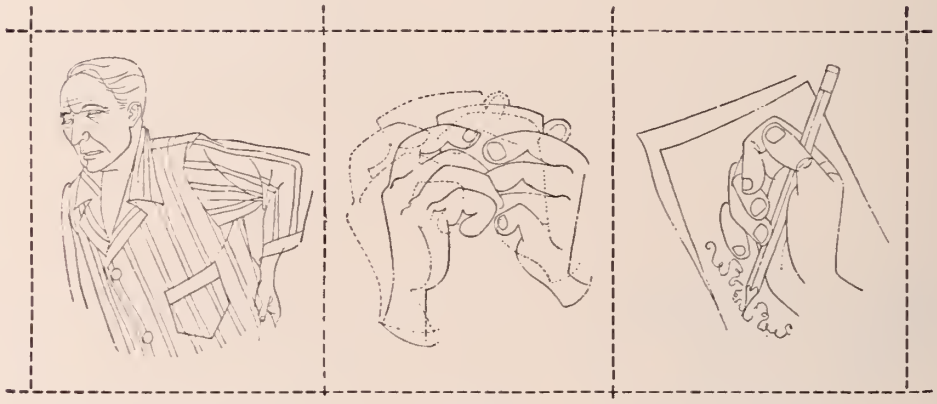
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EDITORIALS

GUEST EDITORIAL

*RESPONSIBILITIES OF READER, AUTHOR AND PUBLISHER**

by Austin Smith, M.D.

The primary objective of the average medical journal is the dissemination of medical information to practicing physicians. Today, however, physicians want special information which is not always medical in the usual sense of this word. Thus the reader of the modern medical journal has varied requirements, the author has new fields for editorial exploration and the publisher has new demands which must be added to those that have faced him for years. To complicate the picture even more is the situation in which "official" journals are placed. Not only must these periodicals contain scientific information but they must report the official news of the associations of which they are a part.

Regardless of the subject matter, whatever appears in a medical journal should serve some useful purpose. This is especially indicated in these times when there are too many periodicals for physicians to read, when there is too much published that should never appear in print and when there are increasing labor costs and shortages of material to cope with. Thus when a statement—scientific or otherwise—is printed it ought to be considered in some respects as the designer of an advertisement should consider his creation: The product must get attention, arouse interest, create desire and precipitate action. But first of all, the product should be worthy of attention.

THE READER

The reader has responsibilities perhaps not normally considered by him as within his province. And yet, since he is the one the author and the publisher are trying to reach, why should he not indicate his pleasure or displeasure with an article or editorial policy? Only thus can the author and publisher truly appreciate the value or reception of their efforts. Why should the reader not write to the author or publisher if he is displeased instead of complaining to others who are in no way responsible for what appeared in print.

Why, also should the reader not indicate from time to time what he would like to see in print? Perhaps his suggestion might be met with much more sympathy than he anticipates.

And if he is pleased with what he reads why should he not put into practice what appeared in print? Too often readers agree with a view expressed on an important issue but make no attempt to put it into practice in their life or community.

And why should the reader not be sufficiently interested in his journal to contribute when he has something worthy of reporting. There are far too many ideas lost for lack of expression.

THE AUTHOR

The careful author is always mindful of his prospective readers' wishes but does not hesitate to go contrary to general opinion when he has the facts to support his argument. Of course his first worry is obtaining and holding the readers' attention and inspiring the reader to make use of the thoughts expressed.

Many authors overlook such practical considerations as limitation of space in all medical periodicals. Too long articles are unnecessarily expensive to set in type and print, they are uninteresting to read and they do not increase the reputation of the author. No one can read all the literature now available and still practice medicine and the shorter and the more interesting is the paper the more likely is it to be read. Usually the paper that is rewritten several times simply to introduce brevity and improve the clarity is the most popular and best remembered—as is its author.

To be well received the communication must be understandable. The writer can present his subject forcefully and use the necessary technical language but the language should be as simple as the subject

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permits. Often if a writer would write as he speaks he would be more expressive and less stiff in his presentation. This is not an open invitation, however, for the use of slang or the avoidance of proper grammatical construction. At times the author must make a conscious effort to remember that his readers may not be as familiar with the subject, or at least his technic, as he is. Someone once said "Words should be so set down that they directly force the reader to think precisely what the writer meant when he wrote them."

The publisher or his editor should never hesitate to make requests that are necessary for good journalism and for the benefit of the readers. Nor should he pause if changes are necessary for sound business reasons. The publisher must always be aware of costs and other factors if his journal is to have sufficient funds and popularity to exist and perhaps expand. Thus emphasis can be placed on brevity whenever possible, a minimum of pictures and graphs with omission of those that are unnecessary or irrelevant, avoidance of repetition, long reviews of the literature and of long introductions, omission of material already well known and of unrelated subject matter and avoidance of long footnotes and bibliographies. Big tables are expensive and not well read. In some instances they are necessary or advisable but usually with a little study much material can be omitted with improvement, some tables can be combined and others can be omitted entirely or placed in the reprints. Graphs are often more expressive than tables but usually requires more work in preparation. Not infrequently authors insist on a multiplicity of pictures, especially "before and after" pictures. Or they may insist on color reproductions. In the United States color is very costly and can be used only sparingly in most medical journals.

Another responsibility of the author is the preparation of an adequate summary. Often he confuses this with the conclusion. A summary is important and may mean the difference between a large reader audience and a small one.

Sometimes one hears the statement that the publication of a medical paper offers an outlet for "ethical advertising" for a physician who wants to become well known. In my opinion, the man who writes a paper solely to advertise himself should not have his paper appear in any reputable journal. A physician should write to stimulate thinking on a subject or to share knowledge gained in his practice or experiments. He does not need to advertise; if he has ability it will become known. Nor should a paper be rushed into print solely to establish priority for someone who wants personal recognition. A medical journal is not a medium for advancing personal ambition, developing a large practice or increasing a bank account. It is for the exchange of information by which the medical profession can practice more effectively medicine and surgery and by which patients will benefit.

Other considerations that are in a sense responsibilities include such details as the author determining the scope of a journal before he submits his paper. Instructions for authors usually appear in each journal but it is surprising to learn the frequency with which authors do not bother to inform themselves of these requirements. If possible the style of the journal chosen should be used when the paper is being prepared.

Often authors do not choose with care titles for their papers. If a title is misleading it will irritate the readers and will also result in the article being indexed in the wrong place. Sometimes a title is so short that it does not even hint at the subject. In other instances it is so long that there is not need for the rest of the article.

Sometimes an author submits the same article to several medical journals hoping that each will publish it. At best he may change the introduction. This is as unforgivable as plagiarism. Prospective authors ought also to remember that papers presented for presentation at a medical meeting may not always be suitable for publication without considerable revision.

THE PUBLISHER

Since the publisher must protect his readers he must insist on accuracy in all departments. Thus, the scientific papers, the editorials and other sections including the advertising pages should be subjected to the same close scrutiny. Some journals are extremely careful in choosing products for advertising whereas others appear to exercise little control. An untruthful statement in an advertisement constitutes as much of a disservice for the reader as does an unscientific paper.

From time to time question of payment of money to authors arises. If authors are paid according to the length of their articles they may be tempted to think more of length than quality. The *Journal of the American*

Medical Association does not pay for the voluntarily submitted articles which appear in its scientific pages. Nor does it supply reprints free of charge. These may be obtained at cost.

Another responsibility of the publisher concerns prevention of exploitation of his journal. There are some individuals and organizations that find it promotionally expedient to refer to medical journals and authors in a way that suggests that these journals support some product or device. To stand by silently while one's journal is being misused for purely selfish reasons is unfair to the contributing authors and to the readers who place faith in the journal, its contents and its policies.

Another aspect of concern to the publisher is the determination of whether the journal is to serve as a source of income or to provide a service. If the journal is sponsored by an organization, someone—usually the organization—must decide if the journal is to pay its own way or be subsidized by the parent group. Each organization must decide its own problems but in general an organizational journal is not considered primarily as a source of income but as a means of bringing the members closer together. If such a journal becomes strictly a commercial venture it will in time show it.

And finally, a responsibility which must be shared by everyone is guanantee of freedom of the medical press. No editor should accept a paper because the author is well known or politically influential. The reader, the author, the editor and publisher should resist relentlessly any attempt to turn a good medical journal into a political mouthpiece for political or personal ambitions. Freedom of the press as a slogan is equally applicable to medical and lay press. Within the last few days a member high in a church told a group of newsmen "You are the guardians, through the printed word, of the true standard of public opinion, as to what should and should not be issued as reading material to this queer, complicated world of ours . . . You bear a great responsibility. The written word is not less powerful than the spoken word . . . truth will always drive out the insincere." The sense of these words has a special place in medicine.

ON WRITING ABOUT YOUR OWN EXPERIENCE

There is a diagnostic fence that hems the practitioner in. Textbooks and speakers paint vivid pictures of well defined clinical entities. The man in the field sees situations before this clear cut picture develops. He may even prevent its development. He calls to his aid his clinical experiece and judgement and what he knows of the physiology of disturbed tissue, often not knowing its name.

The knowledge gained by such a relationship between doctor and budding disease is difficult to evaluate. An effort to do so, however, is almost a must for teachers and preceptors. Nothing could be more conducive to better work and keener self criticism. When the result of such studies should be known by others, the material must be published. To those who for various reasons hesitate to write, the editorial board is ready and anxious to give help or better still—the American Medical Writers Association for a small fee offers a new service—Manuscript Editing. Address communications to American Medical Writers Association, 209 W.C.U. Building, Quincy, Illinois.

CHRISTMAS SEALS

Our physicians need no coaching on Christmas Seals. Recent editorial comment in the *Journal* points up the necessity of continuing the fight against tuberculosis in spite of the all too optimistic lay publicity about control through new drugs. Only the physicians in possession of all the facts can counteract the harm that has been done by over emphasis on the so-called "Miracle Drugs." Nothing could be more disastrous than the false security of resting on the gains we have made. The Seal sale must go on. Physicians everywhere must dispense the truth, dispel the false hopes, and see that it is a success.

Once physicians permit public complacency to release public awareness, the tubercle bacillus will be happy. Leave it to Shelley to idealize young death. His Adonis, John Keats, died of tuberculosis at 26 for want of knowledge. Now that we know, reason must replace romanticism and physicians must protect the living "from the contagion of the world's slow stain."

It's a compliment to the medical profession and an honor to the people of America that the Christmas Seals of 1951 supplied nearly 22 million dollars with which to fight this treacherous foe. Only the Seal sale of '52 can safeguard the health of '53.

This is our call to duty; if unheeded, this space is wasted and those who look to the medical profession for protection against the ravages of disease will suffer.

Scientific Article

RECENT DEVELOPMENTS IN THE FIELD OF UROLOGY*

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In this paper we shall try to review, in the time allotted, a few aspects of urology, to see what new methods show promise and to re-evaluate some of the older ideas.

Urology is already a diagnostically accurate field. The various methods of direct observation of the urinary tract, coupled with x-rays, have made this possible. Several new x-ray techniques have made urology still more accurate.

One such technique is that of Mathei for infant pyelography. Due to obscuring gas in the bowel, pyelography in children has often been unsatisfactory. Quite by accident Mathei discovered a method of overcoming this difficulty. He gives eight ounces of formula or of milk immediately prior to the injection of intramuscular Diodrast, following which the usual films are made. The renal structures are rendered clearly visible in the films due to the double contrast produced by the dilated, fluid containing stomach overlying the kidneys. Often the x-rays are so clear as to make retrograde pyelography unnecessary.

Another x-ray technique which is gaining more favor is the use of arteriography to visualize the vascular patterns of the kidneys. This method has been used since 1942 by O. A. Nelson and by Doss but only recently has it become generally accepted. It involves the insertion of a long needle into the aorta. At first glance this impresses one as being a very hazardous procedure. However, the actual morbidity is low. A modification of the aortography technique has recently been introduced by Pierce. He reports on the use of a plastic catheter introduced retrograde in the femoral artery.

We are still progressing in our knowledge of the use of the various antibiotics. In urology the more soluble sulfas such as Gantrisin and Elkosin are replacing the older drugs. The various "mycin" preparations all have their place, dependent on the type of infective organism. We are finding Polymyxin (Aerosporin) to be less toxic than we had at first supposed. It is of value in treating resistant pseudomonas aeruiginosa (pyocyaneous) infections.

KIDNEY

Urologists traditionally have been extraperitoneal surgeons. That is, we have preferred to stay out of the body cavities. In some cases I am afraid we have gone to unnecessary lengths to stay out of the chest or abdomen. In recent years, however, the transthoracic or transperitoneal routes have become more popular, at the expense of the traditional loin incision. Also, the incision as recommended by Hess, in which the 12th or 11th rib is resected, is being used more and more frequently.

The problem of the technique for the surgical correction of hydronephrosis seems to be approaching a solution. Each case still must be treated individually but the plastic "Y" procedure of Foley, together with the Davis intubated ureterotomy separatecy or combined, seem to handle a large percentage of cases. We are learning that we must understand how the kidney pelvis and ureter heal after surgery. It is only in this way that the type and duration of drainage and splinting can be properly selected.

ADRENAL

The surgery of the adrenal glands is becoming of greater importance. This is due to an increased interest in adrenal tumors and in the adrenal itself as a possible factor in malignant disease and in hypertension. Now that replacement therapy can maintain life comfortably in the absence of any adrenal tissue, we are learning that bilateral adrenalectomy has a definite place in our surgical armamentarium. Because of the urologist's knowledge of kidney anatomy and surgery, he is well qualified to undertake the often hazardous and arduous operations on the near-by adrenal.

URETER

The search for an ideal method for transplantation of the ureter to the bowel continues. It is generally agreed that forming

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the junction of the bowel and ureter is the most difficult part of this operation. At this point leakage, stricture, and reflux of the bowel content may occur. The most serious late complication is stricture. For this reason Cordonnier and also Nesbit have evolved mucosa to mucosa techniques. These do not employ the tunneling entrance into the bowel which Coffey believed important to prevent ureteral reflux. Many of these cases will show air pyelograms when examined post-operatively but this may be of little significance.

BLADDER

It seems evident that carcinomas of the bladder must be separated into two groups. The papillary, and less invasive, tumors can be handled by means of transurethral resection even when large and bulky. The sessile, and more invasive tumors are still difficult to treat. Many of these cases will show penetration of the tumor into or through the muscular wall of the bladder. Thus, they are difficult to completely eradicate. It seemed for a time that total cystectomy combined with diversion of the urine might salvage these advanced cases. However, many of these patients still die of metastases. Some urologists, therefore, are combining these procedures with a radical dissection of the pelvic lymph nodes. Others have attempted the so-called "Pelvic Evisceration" in which the entire pelvis is cleaned out and a wet colostomy formed. All these operations are accompanied by a high mortality rate or are ineffective in controlling the disease, or both. For these reasons, these radical procedures have not been generally adopted in spite of the fact that we have little else to offer these patients in the way of curative surgery. Pallitation may be achieved through diversion of the urine by means of ureterosigmoidostomy.

Radiation therapy in the treatment of bladder neoplasms has continued to lose favor but one method shows promise. This is the radium catheter as devised by Lewis. He placed a radium container within the end of a Foley catheter and so placed that the inflated balloon holds the radium at a set distance from the bladder wall. This method is still being evaluated and as yet we do not know its exact limitations.

PROSTATE

It has now been about seven years since Millin introduced the retropubic method of prostatectomy and thousands of retropubic operations have been performed all over the world. This operation has its advantages and disadvantages just as the other methods of prostatectomy do, but it can be said to have firmly established itself as the method of choice in selected cases.

In the field of prostatic carcinoma there are two new and potentially valuable procedures. The first of these is the Flocks method for treating locally invasive glands, which have not yet metastasized, with radioactive gold. These injections are made under direct vision using a special syringe and using a radioactive gold solution which is produced as a part of the atomic research program. This method is very new but early results have been very encouraging. Of course, adequate facilities for handling of radioactive isotopes is a prerequisite for the use of this method.

The second potentially valuable tool in our attack on prostatic cancer lies in the total adrenalectomy procedure of Huggins. Before the advent of cortisone, Huggins demonstrated that androgens produced by the adrenal may stimulate prostatic carcinoma after orchectomy and in spite of estrogen therapy. However, at that time, bilateral adrenalectomy was accompanied by such a high mortality rate as to make the procedure impractical. With the use of cortisone these patients can be kept alive and the study of the effect of adrenalectomy on prostatic and other cancers may now be made.

SUMMARY

We have tried to review some of the recent advances in urology. Some older methods become increasingly valuable as time goes on, while many new ideas give evidence of potential value for the future.

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THE EMERGENCY CARE OF PATIENTS WITH FRACTURE*

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The emergency care of patients with fracture should be adequately provided by the general practitioner, even in rural communities. The incidence of fractures and the need of emergency care have been greatly increased by modern industry and the present methods of transportation.

The primary purpose of emergency treatment is to preserve life, and when possible to prevent crippling. With this accomplished, the patient must be prepared for transportation and definitive treatment.

The general practitioner is usually the first physician to care for these cases, but the first treatment usually is administered by a passer-by, a friend, or an ambulance attendant. Therefore, a community should have a substantial number of individuals adequately trained in first aid principles. As physicians we must teach them by precept and example. We should insist that ambulance attendants be well trained and skillful in the application of these principles.

I have prepared several case reports which may serve to illustrate the necessity of diligent attention to emergency care. If the case is sent to a specialist, the attending physician should remember that he is primarily interested in helping both the patient and his physician, and should not be considered as a critic. With this viewpoint in mind, the following cases are presented.

CASE NO. 1. A 58-year-old man arrived by ambulance after traveling over 100 miles. He had suffered compound fractures of both tibia some seven hours before. He had received an injection of morphine, and some type of paste had been applied to his wounds. There was no splinting and no protection of the wounds other than a few gauze squares. Hemorrhage was still moderately active and the man was on the borderline of shock.

CASE NO. 2. An 11-year-old boy sustained a simple fracture of the distal end of his humerus. The arm had been adequately immobilized in a wire-net splint, but the bandages had not been adjusted since application three days previously. His hand was tremendously swollen and cyanotic. The skin of the arm was macerated and blistered from pressure and impeded circulation. Effective treatment of the fracture was delayed for over a week while these conditions were being corrected.

CASE NO. 3. An eight-year-old boy with a supracondylar fracture of the humerus arrived with his arm in complete extension on a splint. The proximal fragment was impinged on the artery and he had developed thrombosis. There was subsequent gangrene of parts of his hand.

CASE NO. 4. A 42-year-old man was seen 48 hours after a fracture-dislocation of his ankle. Due to the dislocation the skin was stretched over the distal end of the tibia and later became necrotic. A chronic ulcer developed necessitating cross-leg skin graft.

CASE NO. 5. A 16-year-old boy fell from a tree and suffered fracture of the cervical spine. He was transported 85 miles by ambulance with no stabilization of his head or neck. Paraplegia may have been inevitable but he should have been given every possible chance.

CASE NO. 6. A 45-year-old woman was sent 90 miles by ambulance with a compound fracture of the left tibia, compound fracture of the left elbow, and a simple fracture of the left forearm. She had received treatment for shock and an attempt had been made to immobilize the fractures with modified Thomas splints. Bleeding was active from the left leg, and she was in shock on arrival.

There are similar cases which could be reported, but these illustrate the need of adequate and early treatment. There are innumeral cases where the emergency treatmnt was excellent, and in some was undoubtedly responsible for preservation of life and limbs. One case is that of a woman who had compound fractures of both tibia

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and fibulae, the right elbow, and left wrist; and a simple fracture of the left femur and left clavicle. Her emergency treatment for shock and adequate splinting were unquestionably responsible for her survival. Another case was a fracture of the shaft of the femur. The patient was an infant who had been placed in Bryant's traction. We afforded the hosiptal care; no other treatment was necessary.

In the confusion of treating the injured and frightened patient, we may become absorbed in ineffectual details. We should develop an organized method of examination and treatment. First comes a preliminary examination to determine where, and what help is needed. *Shock* is the primary concern in the injured and with it the control of active hemorrhage. Blood loss is best replaced by whole blood or temporarily by blood plasma. Tourniquets should be avoided if possible; pressure dressings and clamping of bleeders with hemostats are preferred. Pain should be diminished without excessive depression of the patient, and fractures should be properly immobilized. This serves to decrease the shock to the patient, to decrease hemorrhage, relieve pain, and prevent additional injury during handling. Contaminated wounds should not be closed by suturing as an emergency procedure. Occasionally a wound is sutured with obvious care and skill but also obviously containing debris. I have reopened wounds of this type and found dirt, grass leather, cloth, and similar matter in the depths of the tissue. Infection is certain, and the tetanus and gas gangrene are probable in a case of this type. These wounds must be surgically clean and adequately debrided before closure.

Simple fractures should be splinted as soon as possible, and certainly before transportation for any distance. An effort should be made to relieve pressure of bone fragments on blood vessels, nerves, and skin. This can usually be done by gentle traction. Dislocated joints should be reduced if this will not cause undue trauma to the tissue or shock to the patient.

Compound fractures demand the same general principles of treatment. Splinting should be carried out early, major bleeding controlled and gross contamination removed. The bone ends should not be reduced into the depths of the soft tissue as this deposits contaminants in these tissues. The physician should decide as soon as possible where and when definite treatment is to be carried out. This treatment should begin within 12 hours following the injury. If tetanus antitoxin, penicillin, or other medications are given, the operating surgeon should know about it. X-rays and a statement of findings and treatment should accompany the patient.

Splints for emergency immobilization are not necessarily expensive. Padded boards, heavy wire-net screen, and plaster splints can be quite effective and are readily available. Metal splints are effective when properly used but often are not available and may represent considerable expense. The Thomas splint, or one of its modifications, is one of the most useful pieces of emergency fracture equipment. With proper application, it will maintain a leg or arm very efficiently for transportation over long distances. It also permits examination of wounds without removal of the splint or disturbing the limb. A plaster cast is the most efficient means of immobilization but is impractical and unnecessary in most emergencies.

Fractures of various types and locations require different forms of treatment. In fractures of the face and jaw the airway may become obstructed because of swelling of tissue, deformity due to injury, or hemorrhage. An adequate airway is the primary concern and must be established immediately. It is occasionally necessary to do an emergency tracheotomy. Bleeding vessels should be ligated.

Fractures of the cervical spine require extreme gentleness in transporting and handling. Position should be maintained in a nearly neutral attitude or with very slight extension. Light traction combined with sandbags or other padding, serves to hold the head and neck very well during transportation. Movement to or from a stretcher or carrier should be carefully controlled.

When ribs are fractured, they may be simple and of little concern, or they may be extensively shocking and complicated by hemorrhage of the intercostal artery, perforation of the pleura or the lung. Bleeding and sucking wounds of the chest should be closed with saline or vaseline pressure dressings as soon as possible.

A fractured clavicle is generally not complicated. Occasionally, however, there will be puncturing of the apex of the lung, or impingement of vessels or nerves. By forcing

the shoulders upward and back while counter-pressure is exerted over the upper spine, this impingement will be relieved in most cases. A simple figure-of-eight bandage around both shoulders will then suffice to maintain position until more complete examination and treatment can be given.

The upper arm and shoulder regions are difficult to control. A Valpeau bandage or strapping of the arm to, and across the chest may prove to be the best available method. Fractures of the shaft of the humerus are handled essentially in the same manner, but special care must be given to prevent injury to the radial nerve. An airplane splint or modified Thomas arm splint will prove most efficient.

Fractures in the region at the elbow should be splinted in mid-flexion. Plaster splints are usually best if available.

The forearm can be held with boards, paper, or nearly any adaptable material at hand.

Fractures of the vertebral body of the dorsal spine will generally require firm support to the patient's trunk for transportation Because of the ribs and associated structures, these fractures are relatively stable. They should be treated with due respect and movement should be carried out with the patient on a firm surface such as a board or stretcher. If no rigid support is available, the patient may be carried in a prone position.

Fractures of the lumbar spine should be maintained in moderate hyper-extension. It is a simple matter to keep the patient in a prone position or to support the area of injury by placing a rolled blanket or a sandbag beneath the back with the patient supine.

Fractures of the pelvis may cause severe shock. After preliminary shock has been abated, the patient should be moved on a stretcher with gentle support to the hips by binding or sandbags.

Fractures of the hip and upper femur are common. Immobilization should be established soon to promote comfort and diminish shock. Skin traction to the leg with pillows and sandbags for additional support is generally sufficient. A Thomas splint with traction and bandaging will keep the fracture secure until additional treatment can be rendered. The injured leg may be bound to the sound one by tape or bandages, preferably with a long board splint applied on the lateral surface.

In fractures of the shaft or the lower end of the femur, the Thomas splint offers one of the best means of immobilization for transportation. Padded boards or folded blankets can often give comfort and protection when the occasion demands.

Fractures of the tibia or ankle are easily immobilized by plaster splints, folded blankets, pillows, or padded boards. These splints should preferably extend above the knee to prevent rotation.

SUMMARY

The emergency treatment of patients with fracture is very important. Preservation of life and limb are paramount. Shock should be combatted immediately. Body temperature should be maintained; hemorrhage controlled, blood volume replaced, pain moderated, and fractures immobilized before transportation is attempted. It is our responsibility to treat these emergencies, to provide training in first aid, and to teach the public that such eventualities should be met with poise and intelligence.

The Journal
Wishes You
a
Merry Christmas and Happy New Year

CORRECTIONS OF NASAL DEFORMITIES

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Psychologic Effects of Facial Disfigurements

The person with an unsightly nasal abnormality may be seriously handicapped in the business and social world, and as a direct consequence may develop somatic and psychic disturbances. In many instances, these visible and conspicuous non-conformities are more harassing than congenital or acquired defects in other parts of the body. Many individuals readily compensate for physical or physiologic impairments, but there is no mechanism that will shield an individual with a facial disfigurement from the continued attack upon his self-esteem. The person who is unhappy because of an unsightly nose or protruding ears will have his inner security assailed each time he looks into a mirror.

To many physicians the nose is a rather uninteresting part of the body, unless there is some nasal obstruction or impairment of breathing. To the individual, however, an external deformity of the nose — whether congenital or the result of injury or disease — may be the primary object of concern, even though no obstruction exists. Such unfortunates, children or adults, should be given an opportunity to have this handicap removed. They should not be encouraged to endure the misery and abuse to which they are subjected, for no one knows the indelible mental effects thus produced.

The need for reconstructive plastic surgery to correct the condition, and to diminish the handicap and the possible psychologic sequelae is evident. It should not be inferred, however, that every individual with a nasal abnormality should be operated upon; for there is no direct relationship between the size or severity of the physical defect and the reaction to it. Individuals with only slight or seemingly minor facial abnormalities frequently suffer more mental distress than those whose defects are pronounced. This mental distress, which stems not from the physical factors but from psychologic ones, is as real as actual physical pain and demands tolerant and understanding consideration.

The plastic surgeon must distinguish between the patient whose anxiety is based upon factors other than the presenting complaint, and the patient suffering from a situational reaction. If a surgeon, consulted by a patient whose psychologic state may be a reflection of the deformity, is uncertain as to the nature of the reaction or anxiety, he should have no more hesitation in requesting an interview with a psychiatrist than in asking for a medical, or urologic consultation, or a roentgen examination. The psychiatrist will be able to help differentiate those patients whose reaction is related to the disfigurement, and in whom a repair or improvement of the abnormality will be helpful from those with a psychiatric condition who will only find another symptom for the expression of emotional difficulties if the deformity is repaired. The psychologic result of the operation will be entirely different in these two types of patients. In one instance, a helpful service will have been rendered; in the other a great wrong may have been committed.

As a general rule, the more pronounced the deformity or loss, the more likely is a reasonably good result from a plastic operation to be acceptable to the patient. Conversely, it is well to be cautious about embarking upon the correction of slight defects. A patient's inability to state accurately and succinctly the particular thing that displeases him should cause the surgeon to have grave doubts concerning his ability to satisfy, and should excite suspicion that the accused nose might not be the real difficuty. There is a class of patients who have a nasal complex not relieved by operation, however successful, and operations on such patients are to be avoided. The differential diagnosis between the genuine and the false is, at least in some instances, one of considerable difficulty. The help of a psychiatrist is of great value when there is any doubt.

Pre-operation Analysis of the Deformity and Plan of Reconstruction

Before attempting the correction of any nasal deformity, it is imperative to have a clear mental picture of the final result to be achieved. The proper form and dimensions of the nose to be reconstructed can be esti-

mated only by a comparison of the deformed organ with some standard. The creation of a single norm applicable to all faces is impossible, since the correct proportion of a given nose will, for the most part, depend upon the character of the structures which immediately surround it. Furthermore, a norm such as this would not be desirable, since criteria of the ideal shape are by no means universally accepted. Although no fixed standard can be determined, one may establish an esthetic norm for each individual face, to serve as a basis for the calculation of the deformity. Considerable judgement will be necessary in evaluating each person and face for in some individuals variations from fixed measurements and proportions, even though outside of our arbitrary normal limits, do not justify correction.

Any disfigurement of the nose is produced by loss of tissue or by distortion of one or more component parts of the nasal framework from the position normally occupied in relation to the other parts or to the facial surroundings as a whole. In some instances, there may be both loss of tissue and malposition of the segments. Since noses are of infinite variety, it is imperative, when planning the reconstruction and executing the repair, to remember that the final result should be made to blend and harmonize with the configuration of the surrounding head and face, of which the nose is the most important part. Because of the wide normal variation, the correct proportions of a given nose will for the most part depend upon the character of the structures which immediately surround it. The aim of the reconstruction then is not to obtain perfect symmetry, but to bring an abnormality within the range of normal.

Case Presentations

Case Number 1:

This patient was a 23 year old air-line hostess who had always been very conscious of her "ugly" nose. As she stated it, "my nose does not fit my face." Her diagnosis was correct because her facial features were small except for her large nose. The nasal deformity consisted of a large dorsal hump, a long and bulbous tip, a drooping columella, and an apparent short upper lip. The deformities were corrected in a single operation, thus transforming the nose into a pleasing structure and one which now blends with the other facial features. (Figure 1)

Case Number 2:

This lady was a 34 year old housewife who was very interested in musical productions and who was the possessor of a very fine soprano voice. She told the story during our initial consultation that she had always been very conscious of her large humped nose and that it definitely prevented her from entering into musical shows as she would like to do. After examination, one had to agree that her nose was deformed so much so that it gave her face a "sharp" look. There was a large hump as well as very large and prominent alar cartilages especially along the columella. A rhinoplasty corrected all her unwanted features and gave her face a "soft" look. (Figure 2)

Case Number 3:

This 14 year old school girl had a typical saddle nose which developed following a septal operation performed elsewhere. The deformity was corrected with the insertion of an autogenous cartilage graft. Not only was the external deformity corrected with this single procedure, but breathing space was also noticeably improved. (Figure 3)

SUMMARY

In rebuilding or in changing a nose, the plastic surgeon is dealing with material facts related to anatomy and physiology, and with fundamental rules that have been formulated in regard to the proper ensemble of the facial elements. Before deciding to embark upon the project, however, he must also take cognizance of the patient's mental attitude. If it has become warped, it can in the end defeat the main objective—pleasing the patient—regardless of the fact that the reconstructed nose might be surgically and artistically as near perfection as the available material and skill will permit. The psychologic status of patients who seek facial correction should, therefore, be considered.

Because of the natural prominence of the nose, any nasal deformity is conspicuous. The reconstruction of the defects by those properly trained and qualified offers very little difficulty for the patient, and will in a great many instances result in a greatly improved general appearance. The psychic importance of reconstructive surgery of the nose has been emphasized. The counsel of "patient resignation" too often given by physicians and friends is unkind and un-



TOP TWO ROWS FIG. 1—Pre-operative and post-operative.

LOWER TWO ROWS FIG. 2—Pre-operative and post-operative.



LOWER RIGHT FIG. 3 — Pre-operative and post-operative.

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OF PHILADELPHIA

sound in the light of surgical achievements in plastic surgery.

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BOOK REVIEW

DOCTORS IN BLUE; the medical history of the Union Army in the Civil War, by George Worthington Adams. 253 p., illustrated. New York, Henry Schuman, 1952. Price $4.00.

No period in American History can approach the War Between The States for its ability to sustain the interest of a legion of fanatical scholars and casual lay observers. Almost every facet of the struggle has been explored in detail and the lives of its protagonists, both great and small, has been laid bare by the biographer. To this growing mountain of literature George Worthington Adams has added DOCTORS IN BLUE, the medical history of the Union Army. It is a welcome addition not only to Civil War history but to the history of American Medicine as well.

Doctor Adams, a professor of history at Colorado College, has wisely steered away from realms of dull medical statistics to paint a comprehensive picture of the problems of the embryo medical corps of the Union Army. He has effectively grouped the sociological and ecouomic aspects of the war, its politics and personalities, and some rather caustic observations on the stupidity and blundering ignorance of the day into a readable history. While doctor readers may wish for a more liberal sprinkling of medical detail, and perhaps regret the author's emphasis upon political factors, all will enjoy DOCTORS IN BLUE as an illuminating picture of the military medicine of a century ago.

The shortcoming of the medical department of the Union Army make up a story in themselves. Most of these shortcomings are those of the men who peopled the department—the parsimony of the Surgeon-General, crochety old Colonel Thomas Lawson, for instance. At 85 he was more concerned with paring a slim budget of $115,000 appropriated by Congress in 1861 to meet the needs of the medical department than in building an effective instrument of battlefield care. Then there was the chief dietary officer who starved the troops on the Civil War counterpart of C-Ration, the "Horsford Ration." It saved the government $10,000,000 a year until enraged doctors secured its condemnation. The medical officers with Ohio troops who vaccinated against an unknown disease with cultures from syphilitic chancres from a "young lady" spread the venereal disease to hundreds of innocent soldiers. Contract "surgeons" of no medical education—salary $30.00 a month and up—added to the battlefield toll. But for these classic examples of ignorance, the Union Army doctor was on the whole efficient for his time and did the best with what he had. For every Lawson was a redeeming counterpart; Dorothea Dix, for instance, who added to her stature as a reformer of the nation's vile insane asylums by organizing the Women's Nursing Corps and opening new opportunities in a new profession for American women.

Doctor Adams is soundly backgrounded in Civil War history and it becomes apparent in his scholarly but warm and human analysis. Although limited in appeal to Civil War scholars and to doctors, DOCTORS IN BLUE nonetheless offers a significant addition to a shameful period of American History.—Jack Spears.

PATRONIZE JOURNAL ADVERTISERS

PRIMARY APPENDECOSTOMY AS A LIFE SAVING PROCEDURE IN APPENDICITIS OF THE AGED

MILTON A. NEUMANN, M.D.
OKARCHE, OKLAHOMA

Appendectomy has become so common that any attempt to add to the literature on this subject, probably the most voluminous of the past half century as concerns any one disease of the human body, may seem at first glance to be further unnecessary discussion of an overworked subject. Such, however, is not the case in view of continued mortality in the older age group of patients, age 55 to 75, who at operation are found to have associated complications, i.e., (1) gangrene, (2) abscess, (3) perforation, and (4) diffuse peritonitis. It is in these cases that the value of primary appendecostomy as an adjunct and life-saving measure seems indicated.

Appendectomy is now so common an operation as to be considered within the capacity of the average surgeon and the "occasional" surgeon. The apparent simplicity of the operation, however, is often misleading as complications either at the time of, or subsequent to the operation, often require the exercise of a high degree of surgical judgment if a fatal issue is to be averted. This is particularly true in the aged who most often present themselves for help late in the course of the disease and who often have one or all of the complications cited. It is in the treatment of this group that the operation of appendecostomy should be considered and more often employed.

The force of this generalization was brought home to the writer over 20 years ago, who after having seen the fatal outcome of complicated cases in the aged several times during interneship, observed the striking recovery of a similar and apparently hopeless case in whom the surgeon placed a catheter into the cecum because repeated attempts to close the stump proved unsuccessful due to induration and edema of the cecum. The writer has since employed primary appendecostomy many times and with such uniformity of success in such complicated cases that it seemed worthwhile to review and present the subject at this time.

It is common knowledge that the pain threshold in older people is high. This fact plus the widespread and indiscriminate use of laxatives by this age group as first treatment in the home for any and all types of abdominal distress, and the unwillingness of the aged to seek medical help early in the course of illness, undoubtedly account for the high percentage of gangrenous, perforated appendices and diffuse peritonitis found when they reach the operating table.

While assuming the average doctor's ability to diagnose and differentiate appendicitis from the many problems presented by right lower quadrant pain, it seems not amiss to again call attention to the high pain tolerance of older people and to remind ourselves that the signs and symptoms of appendicitis in the aged are usually atypical. Nausea and vomiting usually occur late as a result of ileus. Rebound and contralateral pain are most often seen late in the disease because most cases in this age group are gangrenous and peritoneal reaction occurs slowly. Abdominal muscular rigidity occurs late for the same reason. Leukocytosis and fever may be lacking until rather widespread dissemination of infection has occurred. Having ruled out other common causes for right lower quadrant pain in an elderly individual, one can, with a high degree of diagnostic accuracy, depend upon localized pain in right lower quadrant plus a history of desire to defecate or pass gas but without relief on repeated trips to the stool. Once the diagnosis is established operation is imperative and urgent for reasons stated above regarding complications.

Either McBurney, right rectus or transverse incision may be employed depending chiefly on the preference of the operator. In instances where there is no doubt of the correct diagnosis, the McBurney incision is preferred by the writer as allowing direct access to the affected area and a minimum of handling of the intestine.

On opening the abdomen of these complicated cases one is confronted with a serosanguinous or purulent exudate usually having fecal odor. The cecum is found to

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be dull and lusterless, grossly distended, as in the small bowel adjacent to the area, with gaseous and liquid material and with plastic exudate in the field of operation. Often the cecum is so edematous as to feel hard and firm and raise the question of malignancy in the operator's mind in which case biopsy of cecal wall at base of appendix should be done before completing the operation. Errors of surgical judgment have been made at this point as noted in the literature and right ileo-colectomy has been done because of the gross appearance of the cecum in these cases with the resultant consternation on having the pathologist report "appendicitis."

Careful, systematic search with a minimum of handling of intestine will usually reveal the gangreneous perforated appendix which can usually be dissected free by gentle finger dissection. After ligating and dividing the meso-appendix and amputating the appendix, one is then confronted with the problem of the appendiceal stump which cannot be closed because of marked edema and rigidity of the cecal wall. The simple, logical and life-saving procedure of appendecostomy is here indicated. A size 16 or 18 Bardex Malecot Four-wing catheter, the ballooned end of which is put on a stretch by small forceps is introduced into the cecum through the hole produced by amputating the appendix, the forceps then released and withdrawn allowing the catheter tip to balloon within the cecum. When possible a small portion of omentum is drawn down, split for about two inches and placed about the catheter. A stab wound usually lateral to the operative incision, but depending upon the position of cecum and its easy displacement towards and against the abdominal wall, is made and the catheter withdrawn through this stab wound to outside the abdomen. Gentle traction on the catheter and manipulation guides the cecum and its small covering of omental tag to the peritoneum about the stab wound. The catheter is then attached to the skin with cotton sutures. Layer closure of the operative incision is best accomplished with interrupted cotton, a small rubber tissue drain being placed in position above the fascia and to the outside between the Michel clips used to approximate the cut skin edges. No drains are placed within the abdominal cavity. Dressings are anchored in place and the catheter further firmly protected against accidental removal by encircling strips of adhesive tape attached to the tape used to hold dressings in position.

Postoperative care consists of intestinal intubation with mercury weighted Cantor tube when indicated, sufficient intravenous fluids of Beclysyl in Distilled water, Ascorbic Acid and one gram of Potassium Chloride daily. Saline is not used because of its tendency to produce further edema of bowel wall. Antibiotics, usually Penicillin, are given in large doses, unless culture suggests a more efficient inhibitor to bacterial growth in a given case. Early ambulation with toilet in patient's room discourages leg and lung complications, the use of elastic leg bandages where varicosities are apparent is routine and should probably be used in all geriatric surgery.

The catheter is connected to a plastic tube, directed into a drainage bottle at the patient's bedside and the nursing staff instructed to introduce one ounce of tap water into the cecum through the catheter at hourly intervals around the clock by means of an ordinary bulb, and at the same time to flush out the tube leading to the bedside bottle.

The Michel skin clips are removed on the fifth postoperative day and the catheter removed on the seventh or eighth day. Following removal of catheter and usually within 24 hours there can no longer be seen any further fecal drainage, and the maximum has been about three to four days. In no case has it been necessary to surgically close a fistula as a result of appendecostomy. Daily rectal examinations will warn one if a cul-de-sac abscess is forming.

In reviewing cases from the writer's practice for the past 12 years, 17 have been found to fall within the age group of from 55 to 75 years, average age being 61, all of whom at operation were found to be complicated by perforation and diffuse peritonitis of such a character that a fatal termination might have been expected. All presented the gross pathological picture hitherto described. In each case the appendix was removed and appendecostomy performed. There have been no deaths in this series Eleven of these cases were operated before Penicillin was generally available and before the Cantor tube was employed. The Miller-Abbott tube, then in vogue, was only rarely passed beyond the pylorus and usually afforded only gastric decompression.

Death from peritonitis is due to toxemia,

the toxins being absorbed either from the peritoneal cavity or paralytic atonic bowel. Appendecostomy forestalls the onset of postoperative paralytic ileus in these cases, helps prevent obstruction from adhesions by helping to keep the intestines in normal motion by allowing for prompt escape of gas and fluid. This in turn, by relieving tension on the gut wall allows for a more normal flow of blood and lymph thus enhancing the normal reparative process.

While the occurrence of internal fecal fistula is generally relatively low folowing appendectomies in general, it is highest in the aged who have the complications above described. Appendecostomy eliminates this hazard.

One is often amazed and always gratified by the striking recovery of elderly patients so treated whose condition had been considered desperate when viewed in surgery. One is further convinced of the merit of this method as one hears an "old hand" among the nurses remark that, "Now old folks can get well as fast as the kids."

SUMMARY

Appendecostomy is redescribed to call attension to a method, almost forgotten, which in the author's opinion and experience can not only further reduce the mortality in complicated appendicitis of the aged but will also produce comfort, rapid convalescence, and forestall the complication of internal fecal fistula in these dangerously complicated cases.

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MEET OUR CONTRIBUTORS

Marvin B. Hays, M.D., Oklahoma City, wrote the paper, "The Emergency Care of Patients with Fracture," which appears in this issue. Doctor Hays was graduated from the University of Oklahoma School of Medicine in 1945 and interned at University Hospital. He served a residency in orthopedic and fracture surgery at University and St. Anthony.

Maxwell A. Johnson, M.D., Tulsa, is the author of the paper on "Recent Developments in the Field of Urology." A graduate of the University of Chicago in 1943, he interned at Indiana University Medical Center and served his urology residency at Indiana University Medical Center, University of Chicago and at La Crosse, Wisconsin.

James W. Kelley, M.D., Tulsa plastic surgeon, received his M.D., degree from Duke University in 1940. He interned at Duke and Delaware Hospitals and served his residency at Duke. Doctor Kelley has a paper on "Correction of Nasal Deformities" in this issue.

Milton A. Neumann, M.D., Okarche, wrote "Primary Appendecostomy as a Life Saving Procedure in Appendicitis of the Aged," in this Journal. Doctor Neumann was graduated from the University of Oklahoma School of Medicine in 1930 and served his internship in general surgery at St. Anthony Hospital.

W. R. Bett, M.D., London, England, whose article "The Preparation of Medical Papers for Publication: Tools, Shortcuts, and Pitfalls," appears in the November issue, is Research Librarian to the National Association for the Prevention of Tuberculosis, London. He is Bibliographer, British Association of Dermatology; Consulting Bibliographer, Institute for the Study and Treatment of Delinquency; and Medical Consultant to Menley and James Ltd., London. He has given the above address at a number of medical schools, postgraduate institutes, and medical societies in Britain and her dominions. The complete lecture is being published by Messrs Menley and James Ltd (123 Coldharbour Lane, London, S.E. 5), who were responsible for the original idea and for financing it. The book will have a preface by Professor Sir Francis R. Fraser, Director of the British Postgraduate Medical Federation, who originally arranged for this address to be given in the London postgraduate school.

Austin Smith, M.D., Chicago, editor of the A.M.A. Journal, wrote the paper on "Responsibilities of Reader, Author and Publisher" in this issue, at the request of the editor.

PATRONIZE
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Special Article

THE PREPARATION OF MEDICAL PAPERS FOR PUBLICATION: TOOLS, SHORT-CUTS, AND PITFALLS

W. R. BETT,
M.R.C.S., L.R.C.P., F.R.S.L.
LONDON, ENGLAND

In Greek mythology Apollo, god of beauty, culture, rhetoric, and poetry, had a favorite son, Aesculapius, upon whom he bestowed the divine gift of healing, and ever since, loyal to their memories of a friendship that once flowered between poetry and physic, physicians have described themselves as the children of Apollo. That may have been a correct appellation in the stately days of the Renaissance when medicine was part of the learning of every scholar, and literature was part of the learning of every physician. In those leasurely days the doctor, who was not embarrassed, as we are today, by too much technical knowledge and possessed no typewriter, Dictaphone, research secretary, or ghost-writer, found it easy enough to write an article which may not have been scientiffically valuable, but from a literary point of view was a thing of beauty and a joy for ever.

With the rapid growth and multiplication of the many specialties in medicine and the vertiginous accumulation of knowledge, the relationship between medicine and literature has steadily become less intimate. The edifice of medicine is now so vast that its occupants must rest satisfied with exploring the various chambers of but one floor. If they should stray into the floor above or below, they might well imagine they had entered another world whose language they could not understand. Unhappily, the writings of specialists in one department of medicine are frequently not comprehended by those outside it.

The cultivation of literary style is being more and more jeopardized by the conditionsof modern life. With the gradual decline of a classical education we do not today enjoy that intimate acquaintance with the meaning of words and the anatomy of language. The influence of the laboratory with its language of symbols and formulae reduces more and more the narrow magin of opportunity for writing medical literature that is really literature. Finally, superfluous journals lead to superfluous and, therefore, often careless writing.

Though nearly a million scientific articles are published each year, it is the duty of every doctor to report worthwhile observations and to interpret his findings, for the sum-total of medical knowledge is built up of the contributions of individual workers.

The *first essential* in writing is to have something to say—a golden rule frequently neglected. Before writing on any topic, study the literature in that field. There are far too many papers covering the same ground.

The *problem of keeping abreast of* advances in medicine or of studying the available literature on a particular subject is not an easy one for the medical man, for, in spite of the terrific casualties inflicted by the last world war, more than 3,000 medical journals in a multitude of languages exist today. Fortunately a number of useful bibliographical tools are available, the most important of which are the *Index Catalogue of The Library of the Surgeon-General's Office*, the *Quarterly Cumulative Index Medicus*, and the *Current List of Medical Literature*. On my desk I keep and constantly use:

General notes on the preparation of scientific papers. Published for The Royal Society by the Cambridge University Press. London. 1950.

Plain words: a guide to the use of English. 1948; *ABC of plain words.* 1951. Both by Sir Ernest Gowers. London: H. M. Stationery Office.

*Summary of a lecture given at the Oklahoma University School of Medicine on May 5, 1952, with Dr. Lewis J. Moorman presiding.

Rx for medical writing. By E. P. Jordan and W. C. Shepard. Philadelphia: W. B. Saunders Company. 1952.

PRESENTATION OF PAPER

First and foremost there is brevity. Your paper should be short, composed of short paragraphs, which in turn are composed of short sentences. Whenever possible, use simple, short words. There seems to be a prejudice that, if an article is not long enough, it will not attract attention.

TITLE

A good title means a lot to the success of your paper. It should be short, yet sufficiently descriptive. Above all, it should be attractive. Beware of making it too paradoxical, obscure, or even misleading, lest it perplex an unfortunate cataloguer or librarian.

ARRANGEMENT

Every paper naturally has a beginning, a middle, and an end. (An obvious statement, yet how few papers conform to this rule!) A short introduction should give the reason for your article and should briefly refer to previous publications on the subject.

Don't be shy to refer to yourself as 'I'—the modest use of 'he' (the author) may lead to confusion.

Try to make your paper, even though it be highly technical, as interesting as you can. We all know that medicine can be very difficult, but there is no reason why it should at the same time be dull. Writers today, Sir Robert Hutchison complained, are not only afraid of romance—they even fight shy of humour.

A striking opening note to your paper will be welcomed by most readers.

Avoid long paragraphs with continuous lines. Break up your text at suitable intervals with the aid of subheadings and indentations. Finish with a summary. This may be the only part of your paper which many people will ever read, so that it should be conprehensible without having to wade through the paper itself.

CONVENTIONS

To avoid delay in its publication, see that your paper strictly follows the conventions adopted by the journal for which you intend to write. These conventions include the references to other people's work at the end of the article. If a paper to which you refer has been written by three or more authors, it is in order to put *et al.* (*et alii*) after the first name. The following convention is also recognized: when quoting consecutively from several papers published in the same journal instead of repeating the journal, the word *ibid.* (*ibidem*) may be used. Always state the inclusive pagination for any article you quote, to give the reader an idea of its scope. In the case of a difficult foreign language it is helpful to mention in the reference whether there is a summary in English or French, for example.

STYLE

The essence of style has ben described as the avoidance of (1) wind, (2) obscurity. The problem of medical jargon is a vexed one. There is *technical* jargon, which is the heritage of any rapidly growing science, and there is *composition* jargon, which is simply an offence against literary style.

Medical men seldom begin — they commence; they do not make — they render; they do not meet—they encounter; they do not see patients—only cases. Nothing ever happens before—only prior to.

ILLUSTRATIONS

This is an important subject which really requires a talk to itself. A good illustration which really does illustrate your text may save you much verbiage.

STATISTICS

This again is a subject which requires a lecture to itself. If you are contemplating a carefully controlled therapeutic trial, which you intend to report, you should obtain the help of a medical or scientific statistician. Don't be afraid of medical statistics —they are not all higher mathematics.

CONCLUSION

Never send the Editor a carbon copy of your paper, lest he might wonder who has received the original—a rival Editor, perhaps?

Carefully keep a carbon copy for yourself.

Do not publish the same article in another journal is a slightly different form.

Verify your references. Take no reference for granted.

Make your paper as short as you can. Then make it still shorter.

President's Page

CHRISTMAS CARD — REVISED VERSION

It is certain that Christmas and its significance varies greatly among the members of our Association. It is very doubtfiul however that any one of us fails to feel and appreciate the spiritual uplift that traditionally is apparent at this season. It has always seemed to me that as long as one harbors in his heart any envy or hate or grudges that to send out routine and formal Christmas Greetings, however cheery, is not only a futile superficial gesture but is really sacrilegious.

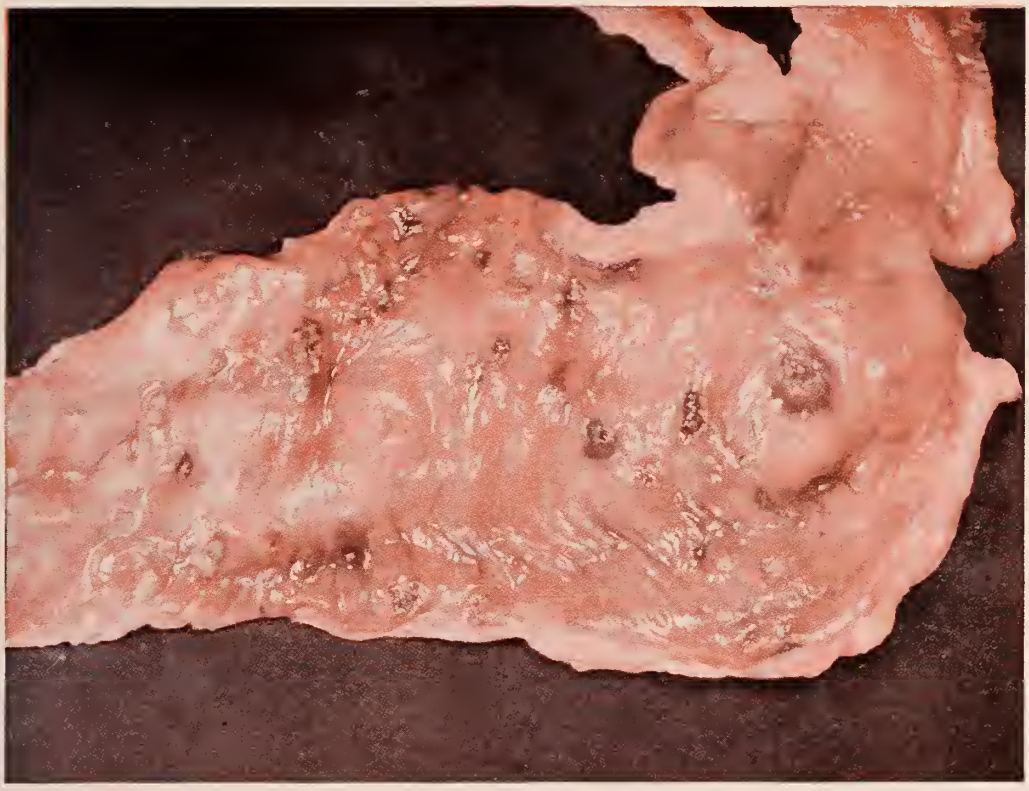
Let's take advantage of this season of love and good will to try out our stature for size by squaring the books for keeps with out fellow man and especially as regards fellow physicians. No scientific endeavor could possibly do as much to revitalize the profession to bring serenity to the individuals concerned. I challenge you !

Allah's Prayer

I pray the prayer that the Easterners do;
May the Peace of Allah abide with you.
Wherever you stay, wherever you go
May the beautiful palms of Allah grow.
Through the days of labor and nights of rest,
May the love of Sweet Allah make you blest.
So I touch my heart as the Easterners do —
May the Peace of Allah abide with you.

Alfred R. Snuggs

President



Ulcerations of Large Intestine due to Endamoeba *Histolytica*

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*Hamilton, H. E., and Zavala, D. C.: Amebiosis in Iowa: Diagnosis and Treatment, J. Iowa M. Soc. 42:1 (Jan.) 1952.

SEARLE RESEARCH IN THE SERVICE OF MEDICINE

Annual Meeting Outgrows Hotel; Top Specialists Slated To Speak

Nine nationally known medical personalities have been scheduled as visiting distinguished guest lecturers at the 60th Annual Meeting of the Oklahoma State Medical Association to be held in Tulsa, April 13-15, 1953.

Dr. Berget H. Blocksom of Tulsa, Chairman of the Scientific Works Committee, said the following physicians had accepted invitations to appear on the program:

W. Albert Ochsner, M.D., Professor and Chairman of the Department of Medicine, Tulane University School of Medicine, New Orleans, Louisiana.

Garfield G. Duncan, M.D., Professor of Medicine, Jefferson Medical College, Philadelphia, Pennsylvania.

F. Bayard Carter, M.D., Professor and Head of the Department of Obstetrics and Gynecology, Duke University Medical School, Durham, North Carolina.

Carl A. Moyer, M.D., Professor of Surgery, Washington University School of Medicine, St. Louis, Missouri.

Francis J. Braceland, M.D., Psychiatrist-In-Chief, The Institute of Living, Hartford, Connecticut.

James C. Sargent, M.D., Professor and Head of the Department of Urology, Marquette University School of Medicine, Milwaukee, Wisconsin.

Paul H. Holinger, M.D., Associate Professor of Otolaryngolgy, Northwestern University Medical School, Chicago, Illinois.

Allan P. Bloxsom, M.D., nationally known Pediatriciau and formerly Professor of Pediatrics, Baylor Medical College, Houston, Texas.

Wendell G. Scott, M.D., Associate Professor of Radiology, Washington University School of Medicine, St. Louis, Missouri.

Present plans call for the addition of an endocrinologist and possibly a pathologist to the list of speakers.

For the first time the Association will meet at the attractive Cimarron Ballroom in the Akdar Theater Building, 4th and Denver streets, Tulsa, just one block from the headquarters hotel, The Mayo. The new site will accommodate 57 commercial exhibits and will provide space for two meeting rooms, showings of medical and surgical motion pictures, and a limited number of scientific exhibits.

The 1953 annual meeting is held a month earlier than usual due to the huge International Petroleum Exposition being scheduled for Tulsa during the month of May. Ample hotel accommodations will be available at all major Tulsa hotels.

The Scientific Works Committee has requested members of the Oklahoma State Medical Association who have papers they can present on the scientific program to submit a title and brief synopsis for consideration. Those acceptable will be scheduled for a 15 minute presentation. Titles and synopses should be sent to Dr. Berget H. Bloxsom, 517 Medical Arts Building, Tulsa. Since the program must be completed in December, it is essential that such suggestions be sent at once.

Dr. Gifford H. Henry will be General Chairman of the 1953 Annual Meeting. He will be assisted by Dr. Berget H. Blocksom, Scientific Works; Dr. William Orlando Smith, Social Events; Dr. Rayburne W. Goen, Registration and Hotels; Dr. Benjamin W. Ward, Publicity; and Dr. Milton L. Berg, Commercial Exhibits.

Details of the social program will be announced later. One of America's top name dance bands has been retained to play for the President's Annual Dinner Dance on Tuesday evening, April 14, 1953.

A prospectus has been sent to all commercial exhibitors and a large portion of exhibit space has already been sold.

All arrangements for the 1953 Annual Meeting are being handled by the Executive Offices of the Tulsa County Medical Society.

TV SHOWS TO HIGHLIGHT DENVER MEETING

Plans are beiug made to present two half-hour network television shows covering high points of the American Medical Association's sixth annual Clinical Session in December. Originating from Denver, the telecasts will highlight Session activities, including presentations of new surgical and clinical demonstrations, special scientific exhbits and other interesting medical features. The programs will be of interest to physicians who cannot attend the meeting as well as to the general public.

Present plans call for coast-to-coast coverage on two different nights during the meeting, December 2-5. Once again the programs are being sponsored by Smith, Kline and French, Philadelphia pharmaceutical firm.

PR CONFERENCE IN DENVER

The AMA's fifth annual National Medical Public Relations Conference will be held Monday, December 1—the day before the opening of the Clinical Session—at the Shirley-Savoy Hotel, Denver. Theme of the one-day meeting will be "Mutual Understanding . . . the Key to Better PR." The Conference program will be geared primarily for physicians. Members of the House of Delegates, officers of state and county medical societies, officers of the Association and executive secretaries and PR personnel are cordially invited.

AAGP PLANS NEXT ASSEMBLY

The American Academy of General Practice Fifth Annual Scientific Assembly will be held in Kiel Auditorium, Saint Louis, on March 23 to 26, 1953. This meeting is a "repeat" for Saint Louis, as the Academy's Second Assembly was held there in 1950.

The program for next March is being designed to give the general practitioner four days of "solid, meaty education in the diagnostic procedures, therapies and techniques useful in everyday practice," according to Dr. Merlin Newkirk, of South Gate, California, Chairman of the Committee on Scientific Assembly. It will cover seven principal subject areas: Pediatrics, physical examinations, industrial medicine, anesthesia, surgery, medical treatment, and cardiology.

The complete list of speakers has not yet been released, but will include such top-flight names as Richard Cattell, M.D., of the Lahey Clinic; Crenston Holman, M.D., of New York; Gradie R. Rowntree, M.D., Louisville, Ky.; Elmer Hess, M.D., Erie, Pa.; Arild Hansen, M.D., University of Texas; and Pinson Neal, M.D., University of Missouri.

The Scientific Exhibit Section will contain 60 carefully selected educational displays (several of them created specifically for this meeting) all closely integrated with the formal lecture program. Through this recently developed technique in program planning, the Academy is able to visually supplement the oral presentations from the lecture platform with related exhibits, which may be studied by the physician at leisure.



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FIFTY YEAR PHYSICIAN, DOCTOR HAHN REPORTS CUCUMBER AS LARGEST FEE

On October 21, 1952, James Petty, M.D., vice-president of the Oklahoma State Medical Association, presented a Life Membership and Fifty Year Pin to L. A. Hahn, M.D. of Guthrie at a meeting of the Logan County Medical Society. Prior to the presentation ceremonies, the Executive Office asked Doctor Hahn for biographical material. In response to the request, Doctor Hahn submitted the following which the editors felt would be of interest to the Journal readers in its original form as written by Doctor Hahn:

Looking back on the half century I have spent in practicing medicine, all of which has been in Guthrie and its environs, I am glad that we chose Guthrie when, as newlyweds, we came to Oklahoma in the early summer of 1902.

There were no long days and weeks of waiting for my first patient after I opened my office here on July 5, 1902. Just 55 minutes later a patient with a broken arm was brought in, and although the man no doubt considered his injury as decidedly bad luck, it looked like a good omen to me.

A shooting victim followed, and then a stabbing case. Oklahoma was a bit rugged, I decided, but I needed the money to pay the rent so wasn't as much disturbed as my young bride who decided that we must have located right "next door to Hades."

One of the things we liked here especially was the association with the fine group of physicians who were already located here, Doctor Duke, Doctor Blesh, Doctor Reed, Doctor Rucks, Doctor Smith, Doctor Petty and Doctor Hill. The last two of these are still with us, and completed their half century of service ahead of me.

An incident that ocurred that first year shows how people often exaggerate in their effort to get the doctor hurry. I was driving along with my horse and buggy when a woman stopped me, saying excitedly, "Doctor, hurry, hurry! Seven people have been killed in a runaway!"

I said, "Why, woman, you don't need a doctor. You want an undertaker."

"Oh, no! They're not killed. Come on, come on," she shouted.

I found that a team had run away and spilled seven people out of a lumber wagon, but one broken arm and a far from serious cut on a child's head was the sum total of the injuries. I was born at Detroit, Michigan, in 1873. After completing my common school education I spent three years at Knox College, Galesburg, Illinois; and in 1898 began the study of medicine at the University of Illinois.

I graduated in 1902, and married Margaret Nagel at Canton, Illinois, that same spring. And together we came west, stopping first at Oklahoma City, but after looking things over there we came on to Guthrie, the capital. The two towns were about the same size at that time.

At first there was no hospital there, but Doctor Blesh and Doctor Reed soon opened a small one upstairs over what is now the Bake Rite Bakery location. We got along with that until the original hospital was built on the site of the present Benedictine Heights hospital by the doctors.

I served as surgeon there from 1916 until I enlisted in the first world war in 1918, serving at Camp Bowie, Texas, where many of the battlefield casualties were brought after having emergency treatment in Europe. After the war I resumed my practice and my position as surgeon-in-chief at the Methodist hospital.



L. A. Hahn, M.D., receives 50 Year Pin and Life Certificate from James Petty, M.D., O.S.M.A. vice-president.

In 1922 I was granted a leave of absence and spent five months in Europe, spending much time at surgical clinics at Berne, Vienna and Munich. I was especially interested in the chest surgery as done by Doctor Sauerbruch of Munich, a man of international fame.

You asked me if I had received any large fees. Yes, I have been fortunate in that respect. And yet, in looking back, I believe that the biggest pay I ever received was a single cucumber.

It happened a long time ago. I had made a call at a little cottage in east Guthrie, and after I had relieved my patient's pain, the little old lady asked me to go with her to look at her garden. There wasn't much to be seen except a cucumber vine which she explained she had watered every day through the dry weather.

"I raised this cucumber vine for you, because you always help me when I am in trouble, although you know I have no money to pay you."

The vine, for all her care, had produced but one cucumber, and she picked it and insisted that I take it home with me. And that cucumber and the gratitude and appreciation that shone in her eyes as she gave it to me, that was my biggest fee.

I do not plan to retire from practice. For the past 15 years I have been slowing up, taking longer vacations; and my work is now largely confined to office work. But as long as I can do worthwhile work I want to continue to do so.

And I am glad that a half century ago I chose the profession I did. There are hardships and drudgery in the life of a physician, of course. But there is also great joy.



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CURRENT ACTIVITIES AT THE OKLAHOMA MEDICAL RESEARCH FOUNDATION

EDWARD C. REIFENSTEIN, JR., M.D.
DIRECTOR



This is the thirteenth in the series of monthly articles concerning the current activities of the Oklahoma Medical Research Foundation. The purpose of this article is to present several recent developments.

The most important event was the open house held Sunday, October 26, 1952. This affair officially recognized the opening of the Research Hospital on September 3, 1952. The physicians of the State visited the Foundation buildings during the morning, at which time they inspected the facilities and had an opportunity to discuss the research activities with the members of the scientific staff. The buildings were open to the general public in the afternoon, and guided tours of the Research Hospital and the Research Institute were provided. Several thousand visitors took advantage of the opportunity to become acquainted with the activities of the Oklahoma Medical Research Foundation.

The program of activities in the Research Institute has now become sufficiently organized so that bi-weekly seminars for the members of the technical staff are being held on Wednesday afternoon. This program was begun on October 1st, and is under the direction of Dr. L. L. Conrad. The activities in the Research Hospital also have been placed on a more organized basis, and beginning on October 3, 1952, regular grand rounds are being conducted by the staff each Friday morning. The daily patient population to date has varied between four and six patients. Most of the patients, however, have stayed in the hospital for two or more months.

Announcement has not been made previously of the appointment of Dr. Loyal Lee Conrad as an associate member of the staff of the Oklahoma Medical Research Institute and Hospital, and as a member of the Section on Cardiovascular Diseases, headed by Dr. Robert H. Furman. Dr. Conrad was born in Brooklyn, New York but has liven in El Reno for most of his life. He is the son of Dr. and Mrs. L. R. Conrad. He received a B.S. from Washington and Jefferson College in 1939, and an M.D. from the University of Oklahoma in 1943. He interned at the Wisconsin General Hospital of the University of Wisconsin system. Doctor Conrad served in the U. S. Army from 1944 to 1946, was a resident in medicine at the University of Oklahoma Hospital for two years, and then was a research fellow in medicine at the University of Michigan Hospitals for one year. Doctor Conrad has been teaching in the University of Oklahoma School of Medicine since that time, and has been in charge of the Clinical pathological laboratory with the title of Assistant Professor of Pathology. Since Doctor Conrad has come to the Foundation, he has transferred to the Department of Medicine, with the title of Assistant Professor of Research Medicine. He is married and has twin daughters.

Another appointment of interest to Oklahomans is that of Dr. Claiborne L. Courtright as a Research Fellow in the Section on Endocrinology and Metabolism of the Foundation. He was born in Stillwater, Oklahoma, and had undergraduate training in Kentucky, Ohio, Indiana, and Oklahoma A & M College, where he received a B.S. in 1948. Doctor Courtright was graduated from the University of Oklahoma School of Medicine, June, 1951, and served an Interneship in Ann Arbor, Michigan at St. Joseph's Mercy Hospital (affiliated with the University of Michigan). Doctor Courtright was selected by members of the research staff of the Foundation as a candidate for the fellowships of The Endocrine Society, and he was awarded for the year 1952 to 1953, the Schering Fellowship of $2,500.00, in order to work with Doctor Reifenstein and Dr. R. P. Howard on the relation of parathyroid hormone to bone. Doctor Courtright received the award in person at the annual banquet of The Endocrine Society in Chicago, June 1952. As a part of his activities at the Foundation, he is enrolled in the Graduate Training Program in a course which leads to a Master of Science degree. He is married to Dr. Ann Comfort Courtright, who received her medical degree in the same class.

Another item of interest is a fellowship awarded by the National Institute of Arthritis and Metabolic Diseases to Dr. Thomas Smith, a postgraduate research fellow who has been working since 1951 with Dr. Charles Kochakian, Associate Director of the Foundation and head of the Section on Biochemistry. This fellowship, awarded for one year, carries a stipend of $3,400.00. Doctor Smith will continue to work on the effect of androgens on oxidative enzymes under Doctor Kochakian's direction. Doctor Smith was born in Ohio and trained at Oberlin College in zoology, and at Harvard University, where he was awarded a Master of Arts degree in 1949, and a Ph.D. degree in 1951 in biology.

The list of individuals who serve as consultants to the various phases of the research program has been revised. The following persons are now included: Dr. Robert H. Bayley, Cardiology; Dr. Cleve Beller, Radioisotopes; Dean Ralph W. Clark, Pharmacy; Dr. Vernon D. Cushing, Personal Care; Dr. Harrell C. Dodson, Jr., Surgery; Dr. R. Q. Goodwin, Medicine; Dr. Howard C. Hopps, Pathology; Dr. John H. Lamb, Dermatology; Dr. Don H. O'Donoghue, Orthopedics; Dr. Emil E. Palik, Hematology; Dr. G. Townley Price, Veterinary Medicine; Dr. F. J. Reichmann, Dentistry; Dr. Peter E. Russon, Radiology; Dr. Henry B. Strenge, Pediatrics; and Dr. Henry H. Turner, Endocrinology.

The Oklahoma Medical Research Foundation continues to receive gifts which implement various phases of its program. One of the most important is $27,500.00 for the purchase of a preparative and an analytical ultra-centrifuge to facilitate the investigative work in the various sections. This generous donation came from the estate of Mrs. Rose Woodworth of Ardmore. Dr. Robert H. Bayley and Dr. O. D. Johnson contributed materially to this development by making the initial arrangements with the Woodworth estate.

On October 10, 1952, the Executive Council of the Oklahoma Division of the C.I.O. visited the Foundation buildings and made a gift of $1,000.00 to provide furnishings for one of the rooms in the Research Hospital. The members of the Executive Council toured the facilities and were informed about the general program of research by the members of the scientific staff.

The Oklahoma State Dietetic Association, at the annual meeting, May 1952, voted to give the Foundation two special balances to be used by the Research Hospital dietitians in preparing weighed meals for the

(Continued on page 435)

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HAVE YOU HEARD?

Tullos O. Coston, M.D., Oklahoma City, was speaker at the American Nutrition Society meeting in Oklahoma City recently where he gave a report of the national meeting of the Friends of the Land.

C. A. Traverse, M.D., Alva, attended postgraduate courses at the Cook County Graduate School of Medicine in Chicago receutly.

Grady F. Mathews, M.D., Oklahoma City, was a member of the committee promoting the movement to form au American Association of Public Health Physicians.

Alfred R. Sugg, M.D., Ada, OSMA President, was recently cited by the Governor of the State of Oklahoma as contributing more to the morale of the Industrial Tour than any other persou on the tour.

K. W. Navin, M.D., Shawnee, spoke on Public Health at a meetiug of the Sponsa Regis Study club in Shawnee.

H. M. Prentiss, M.D., Nowata, has been named chief of staff of the Nowata Hospital.

John McDonald, M.D., Tulsa, OSMA President-Elect, spoke to the honor roll cadets at the Oklahoma Military Academy at one of the monthly dinners on the subject of "Medicine as a Profession."

James H. Holman, M.D., has recently moved to Tipton and opened his practice there. He was graduated from the University of Oklahoma in 1951.

Charles E. Brighton, M.D., Tulsa, was guest speaker at the Junior League get-acquainted program in Tulsa. His topic was "Cerebral Palsy—Present and Future in Tulsa."

F. L. Flack, M.D., Enid, receutly did some postgraduate work iu obstetrics at Johns Hopkius and Duke University.

Gilbert L. Hyroop, M.D., Oklahoma City, attended the American Society of Plastic and Reconstructive Surgery meeting iu New York.

Kelly West, M.D., Oklahoma City, spoke on recent advances in medicine at the Clevcland-McClain Medical Society meeting in Norman recently.

Dr. and Mrs. L. S. Willour, McAlester, recently celebrated their golden wedding anniversary.

Edwin Fair, M.D., Oklahoma City, discussed the layman's responsibility in world affairs at a Tahlequah Methodist Men's Brotherhood monthly meeting.

A. A. Walker, M.D. and *Claude Knight, M.D.*, Wewoka physicians have announced their joint practice of medicinc and surgery with offices in the Ligon building there.

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NEW RADIO SERIES ON SPORTS AND HEALTH

A new series of radio transcriptions dealing with sports and health subjects will be available about December 15 from the AMA's Burcau of Health Education for use by local radio stations. The programs are based upon on-the-scene interviews with Olympic winners in Helsinki, Finland, and with national champions and other outstanding sports figures iu this country.

Topics cover personal aspects, thletic accomplishmeuts, team practice and health values of sports. Among those interviewed were Bobby Brown, M.D., of the world's champion New York Yankees; Harrison Dillard, Olympic 100-meter hurdling champion, and Julius Boros, world's national golf champion.



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The successful use of aureomycin, as described in publications by physicians throughout the world, has increasingly encouraged others to use this antibiotic and publish reports thereon. To date, more than 7,000 original reports, editorials, brief comments, and similar notations have appeared in the published literature.

The trend of the literature clearly indicates that in desperate situations caused by infection, where previously cure would have proved difficult or impossible, aureomycin has saved the day.

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OKLAHOMANS SPEAK IN FLORIDA, CUBA

Henry H. Turner, M.D., Secretary-Treasurer of the Eudocrine Society, and Edward C. Reifenstein, Jr., M.D., Director of the Oklahoma Medical Research Foundation, were speakers at the Fifth Annual Postgraduate Assembly in Endocrinology and Metabolism at the Roney Plaza Hotel, Miami Beach, Florida, November 3-8, aud were members of the faculty of a postgraduate course in endocrinology held in Havana, Cuba, November 13-14 under the auspices of the College of Medicine, National Uuiversity of Cuba.

At Miami Beach Doctor Turner's topics were: ''Pseudoendocrinopathies,'' ''Ovarian Hypofunctiou Syndromes: A. Hypergouadotropic Syndromes; Ovarian Agenesis aud Turner's Syndrome,'' ''Ovarian Hypofunction Syndromes: C. Normogonadotropic Syndromes: Hypothalamic Amenorrhea,'' while Doctor Reifenstein spoke on ''Chemistry and Physiology of Parathyroids,'' and ''Metabolic Bones Diseases; Relation to Endocrine Glands; Osteitis Fibrosa Generalisata, Osteomalacia, and Osteoporosis.''

Doctor Reifenstein's titles in Cuba were ''Pituitary Adrenal Relationships,'' ''General Considerations Concerning Metabolic Bone Disease,'' ''Parathyroid Syndromes,'' and ''Osteoporosis and its Treatment with Steroid Hormones.''

In Cuba Doctor Turner spoke on ''Pseudoendocrinopathies—Differential Diagnosis from True Endocrine Disorders,'' ''Ovarian Agenesis and Turner's Syndrome,'' ''Hypothyroidism,'' and ''Hyperthyroidism and the Use of Radioactive Iodine in the Diaguosis and Treatment of Thyroid Disorders.''

AMERICAN ACADEMY OF OB-GYNE. HOLDS FIRST CLINICAL SESSION

The First Annual Clinical Session of the American Academy of Obstetrics and Gynecology will be held December 15-17 at the Palmer House, Chicago.

The meeting will feature six general sessions and 48 discussion groups of 40 Fellows each. There also will be at least 15 new scientific exhibits aud about 60 technical displays.

The annual banquet Tuesday evening, December 16, will feature an address by the retiring president, Carl P. Huber of Indianapolis. The Academy was incorporated August 14, 1951, and already has some 2400 qualified Fellows.

Election of officers will take place at the annual business meeting Tuesday morning.

PRIZE FOR PAPER ON DIABETES BY MEDICAL STUDENTS AND INTERNS

The American Diabetes Association offers a $250.00 prize to medical students and interns for a paper on any subject relating to diabetes. The paper can be a report of original studies, a biographical or historical note, a case report with suitable comment, or a review of the literature.

Manuscripts must be submitted on or before April 1, 1953 to the Editorial Offices of DIABETES: The Journal of the American Diabetes Association, 11 West 42nd Street, New York 36, New York. The papers will be reviewed by the Editorial Board, which will take into consideration the value of the material and method of presentation in selecting the best paper.

ATTENTION!

St. Louis University School of Medicine Alumni

If you are attending the American Medical Association meeting in Denver, Colorado, December 2 to 5, 1952, you will not want to miss the Alumni Dinner and Smoker Wednesday, December 3, The Onyx Room—Brown Palace Hotel; Cocktails at 6:00 P.M., Dinner & Entertainment 7:00 P.M. Speaker: The Reverend Francis J. O'Reilly, S.J., Vice President, St. Louis University. Make your reservation NOW with St. Louis University School of Medicine, 1402 South Grand Boulevard, St. Louis 4, Missouri.

INTERNATIONAL COLLEGE OF SURGEONS TRI-STATE ASSEMBLY

Surgeons from Texas, Oklahoma and Arkansas will be invited to participate in a Sectional Assembly of the International College of Surgeons in Dallas on Thursday, Friday and Saturday, February 5, 6, and 7, 1953. The meeting will open with a series of operative clinics at Baylor Hospital at 1:30 on Thursday afternoon. It is contemplated that operative procedures in general surgery, urology, proctology, plastic surgery, neurosurgery and gynecology will be scheduled. General assemblies will be held on Friday and Saturday at the Adolphus Hotel. Luncheons will be featured on both Friday and Saturday and a dinner is planned, to be preceded by a get-acquainted hour, on Friday evening. A registration fee of five dollars will be charged. Among the speakers who will be heard at the General Assembly will be:

GENERAL SURGERY

Claude J. Hunt, M.D., Kansas City
Max Thorek, M.D., Chicago
James W. Nixon, M.D., San Antonio
Weldon W. Stephen, M.D., Galveston

UROLOGY

Michael K. O'Heeron, M.D., Houston
Karl B. King., M.D., Dallas

PROCTOLOGY

Fred B. Campbell, M.D., Kansas City
Herbert T. Hayes, .D., Houston
John G. Matt, M.D., Tulsa
George T. Thiele, M.D., Kansas City
Paul Vickers, M.D., Oklahoma City

MEDICINE

Arthur Grollman, M.D., Dallas

PLASTIC SURGERY

Neal Owens, M.D., New Orleans
James T. Milles, M.D., Dallas

NEUROSURGERY

J. Grafton Love, M.D., Rochester, Minn.
Albert D'Errico, M.D., Dallas.

Among the subjects which will be covered are: ''The Prevention and Management of Acute Renal Failure''; ''Surgery of the Colon''; ''Abdominal Injuries''; ''Cardiac Arrest and Impending Death''; ''Intravenous Pyelography''; a panel on ''Diseases of Anal Canal, Rectum and Colon''; ''The Relief of Paiu by Neurosurgical Procedures''; ''Surgical Management of treatment of Increased Intracranial Pressure.''

CONFERENCE ON RURAL HEALTH

Eighth aunual National Conference on Rural Health sponsored by the American Medical Associatiou Council on Rural Health, will be held in the Roanoke Hotel, Roanoke, Virginia, February 27-28, 1953. General theme will be ''Widening the Highway to Health.''

Highlighting the conference will be discussions of the financing of medical care in smaller communities.

OBITUARIES

PETER G. MURRAY, M.D.
1880-1852

Peter G. Murray, M.D., 72 year-old Tulsa physician, died at his home August 25, 1952, a victim of cancer.

Doctor Murray was born in 1880 at Sedgewickeville, Missouri. He attended Marvin College at Fredricktown, Mo., and was graduated from Barnes Medical College, St. Louis, in 1905. He practiced for five years at Thomas, Oklahoma, before coming to Tulsa in 1921. Doctor Murray was the second physician to pass the medical licensure examinations after Oklahoma became a state in 1901.

The widow, a son, and daughter survive.

R. C. McCREERY, M.D.
1869-1952

R. C. McCreery, M.D., pioneer Erick physician, died October 12 following a month's illness.

Born March 18, 1869 in Hillbora County, Missouri, he came to Erick June 9, 1909. He served as a captain in World War II and was a charter member of the Erick Rotary club, an active Mason and Shriner, Legionnaire, and a member of the Baptist church.

Survivors included his widow of the home, three children, two grandchildren and two great grandchildren.

ERNEST BALL, M.D.
1881-1952

Ernest Ball, M.D., 71, long time resident of Oklahoma, died of cancer September 20 in a Sulphur hospital.

Doctor Ball came to Tulsa in 1904 from Lebanon, Mo. He was born at Rolla, Missouri and attended medical school in Dallas. He practiced in Tulsa for two years following World War II and practiced in Sulphur until he became ill in June.

Survivors include the widow, one brother and two sisters.

CARROLL ALLEN JOHNSON, M.D.
1909-1952

Carroll Allen Johnson, M.D., former Healdton physician, died September 14 after a long illness. Doctor Johnson was the son of C. A. Johnson, M.D. of Ardmore, and lived in Wilson at one time.

WALTER W. GROOM, M.D.
1880-1952

Walter W. Groom, M.D., McAlester, died recently at his home as he started out to meet the paper boy with the eveniug paper.

Doctor Groom was born at Linny Creek, Mo., February 13, 1880. He completed his medical education at Louisville Medical College and moved to Bristow in 1901 where he practiced medicine for about 11 years. He moved to Los Angeles in 1912 and returned to Bristow in 1918. After 10 years he moved to Little Rock and soon after that to McAlester.

He is survived by his widow, a son, one step-son, a brother and six grandchildren.

(Continued from page 330)

patients. This equipment has been in use since the opening of the Research Hospital.

A number of grants have been renewed to continue the support of a part of the program now in process. The following should be mentioned: American Cancer Society $25,000.00 (September 1952 - August 1953); Damon Runyon Memorial Fund for Cancer Research, $10,000.00 (July 1952-June 1953); National Cancer Institute, $24,732.00 (November 1952-October 1953); National Institute of Arthritis and Metabolic Diseases, $19,602.00 (April 1953-March, 1954); and American Medical Association, Council on Pharmacy and Chemistry, $500.00 (a new one-year grant) for mycological studies by Dr. John H. Lamb and Gerbert Rebell.

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WHAT MR. AND MRS. PATIENT THINK OF THE MEDICAL ASSISTANT . . . OR SURVEY OF SERVICES RENDERED BY MEDICAL ASSISTANTS*

VIOLET M. NAYPHE
EDITOR, THE STETHOSCOPE

A careful tabulation and digest of the complimentary remarks and constructive criticisms contained in the questionnaires returned were made by the writer and a detailed report of the results has been made to the Executive Secretary of the Oklahoma State Medical Association.

You will recall that the Public Policy Committee of the Oklahoma State Medical Association, in cooperation with a request from the Oklahoma County Medical Assistants Society selected 209 physicians to assist in the "Survey of Service Rendered by Medical Assistants." Each physician was furnished five copies of a questionnaire together with stamped self-addressed envelopes for their return to the Editor of *The Stethoscope*. These questionnaires were given by the physicians to five of their patients who were asked to complete the questionnaire in a forthright and candid manner.

The Survey was a success . . . response being over 20 per cent. Of the physicians who assisted in the survey, 42.6 per cent limited their practices to one particular branch of medicine; 37.8 per cent were interested in general practice; and 19.6 per cent were especially interested in one chanch of medicine but did not limit their practice. Thus, the survey reached patients who solicited the services of physicians who limited their practices or were especially interested in every branch of medicine.

Number One Question on the inquiry pertained to the manner and attitude of the medical assistant when approached by patients in the office or contacted at the physician's office by telephone with a question or problem. Tabulation of the replies to this question indicated that

92.6 per cent were complimentary;
4.6 per cent were complimentary with reservations; and
2.8 per cent were constructively critical.

Representative of the replies tabulated as "Complimentary, with reservations" were:

". . . Receptionist is short if busy. Has a hard time to do all the jobs, yet keeps a pleasant attitude."

". . . I feel I am rushed. That they (nurses) never have time to make my appointments or for me to ask the questions I want to."

"Too distant and cold in larger towns. In smaller towns, very nice."

These replies were tabulated as "Constructively Critical":

From Tulsa:

"Always annoyed. . . ."

From Oklahoma City:

". . . While the life of a good medical assistant may be no bed of roses, it is still her chosen field, and if she is short on patience, tact, and understanding, she should change her choice. Sick people (real or imagined sickness) and their relatives are no longer ordinary people and require the maximum amount of tactful handling from the doctor and his assistant. While many people will excuse and forgive a doctor his shortcomings in temper and disposition, there are few patients who can forgive or forget a short surly reply from a medical assistant."

"I am somewhat disappointed by their poor grammar or poor diction; medical assistants should be more conscious of their speaking voice on the telephone."

Mr. and Mrs. Patient were asked in Question No. 2 of ways the medical assistant could be more sympathetic, interested, tolerant, and understanding. Their replies were tabulated into two groups. The first as "Complimentary." The second as "Constructively Critical." The results indicated a "Complimentary" response of 82.6 per cent of the replies and 17.4 per cent of the replies were "Constructively Critical."

Among the first group were included replies such as:

"Could ask for no more sympathy, interest for ailments."

"I have nothing but the very highest praise for the way Dr.— and —, his assistant, conduct themselves and handle their patients. They are truly a credit to their profession. When the assistant doesn't make a good impression, I lose some faith in the doctor."

Replies in the second group, "Constructively Critical," contained invaluable information:

"I wish she could remember what I am coming to the doctor for."

". . . At times she is so rushed that she does not show the interest she would like to."

"Just be completely sympathetic, completely interested, completely tolerant, and completely understanding. In short, just be slightly superhuman."

Mr. and Mrs. Patient's reaction to situations that were perhaps amusing, embarrassing, or provoking? Replies to this No. 3 question were tabulated as follows:

32.7 per cent indicated no involvement in any situation;
31. 7 per cent made comments;
24.8 per cent made no comment at all; and
10.8 per cent made general comments.

Included in the group, "No involvement in any situation," were the following and comparable replies:

"I laugh at amusing things that happen and to date have never been embarrassed or provoked."

"Don't remember any."

"Never witnessed or have been involved in such."

"None of unusual character."

Comments on amusing, embarrassing or provoking situations:

From Oklahoma City:

"There has to be some; however, no one cares to wait around for service while someone has their little joke regardless of the setting, doctor's office or store."

From Tulsa:

"My reaction to an irritating situation was relaxed because of my previous excellent relations with the medical assistant."

From Tahlequah:

"It is always embarrassing to be examined but she seems to make me feel more at ease and less embarrassed."

From Okmulgee:

"The office girl needs a closed-in space to discuss delinquent bills on the telephone and in person so the ones in the waiting room cannot hear them."

From Maud:

"These girls have the ability to laugh with you—not at you—thereby banishing fear and self-consciousness.

*Ed. Note. The first report on the survey appears on page 134 of the April, 1952, issue of the Journal.

They deserve plenty of praise.''

From Okemah:

''When I was having x-rays taken, spilled substance on my shoes and the nurse got down on her knees and wiped off my shoes. Naturally, there was much laughter.''

Representative of the general comments made in regard to Question No. 3 are:

''Satisfactory.''
''I try to be understanding and considerate.''
''Just grin and bear it.''
''Too broad to answer.''

OF PHYSICIANS — AND ASSISTANTS — MEDICINE, and HOSPITAL NURSES:

''Incidentally, medical bills are just too high.''—Oklahoma City.

''Why not make a survey of the doctors on this basis? Their assistants are not the subject of comments that this writer has heard.''—Bartlesville.

''The most embarrassing thing in a doctor's office, to me, is when the doctor proceeds to reprimand the nurse for shortcomings. I do believe all doctors everywhere do this at one time or another.''—Fort Worth.

''I have found doctors usually have a good sense of humor, and, of course, if an assistant is to be apt in her work, she must have a good sense of humor also—since she has all kinds of people to deal with, including myself.''—Duncan.

''I have only the most complimentary remarks to make regarding the doctors and nurses I have known. All seem to be very courteous and conscientious.''—Tulsa.

''I think sometimes the *hospital* nurses could receive some words of advice concerning courtesy and efficiency. In the case of doctor's assistants, I have noticed much more courtesy and intelligence and interest. I have never had cause to complain about any treatment from the office nurses and receptionists.''—Tulsa.

''The doctor's nurse who is not an R.N. is very cold, indifferent. Never has a smile—and never seems to show any interest. Thinks she knows more than any nurse who is not an R.N., so I do not use her at all. I think as long as the Medical Association sets the price we pay, which is plenty high, they should have to use all R.N. nurses.''—Norman.

A greater number of replies received from the survey tend to compliment the medical assistant. The constructive criticisms offered are a basis for self-analyses and individual betterment. The suggestions and criticisms may also provoke a thought for changes in office procedures or employment of additional personnel.

Results of the survey in a large measure are the results of the distribution of the questionnaires to Mr. and Mrs. Patient. It is hoped that a greater number of questionnaires were handed out and not given to ''hand-picked'' individuals.

It is heartening to know that of the replies received, ''Complimentary'' or ''Constructively Critical,'' none, except perhaps a few, contained a message not heard of already, even twice or three times. . . .

RECOMMENDATIONS: Just good nursing and good business office procedures.

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(S)—Scientific Article
(E)—Editorial
(SA)—Special Article
(A)—Announcements
(BR)—Book Reviews
(TC)—Therapeutic Conference
(ABS)—Abstract
(O)—Obituary
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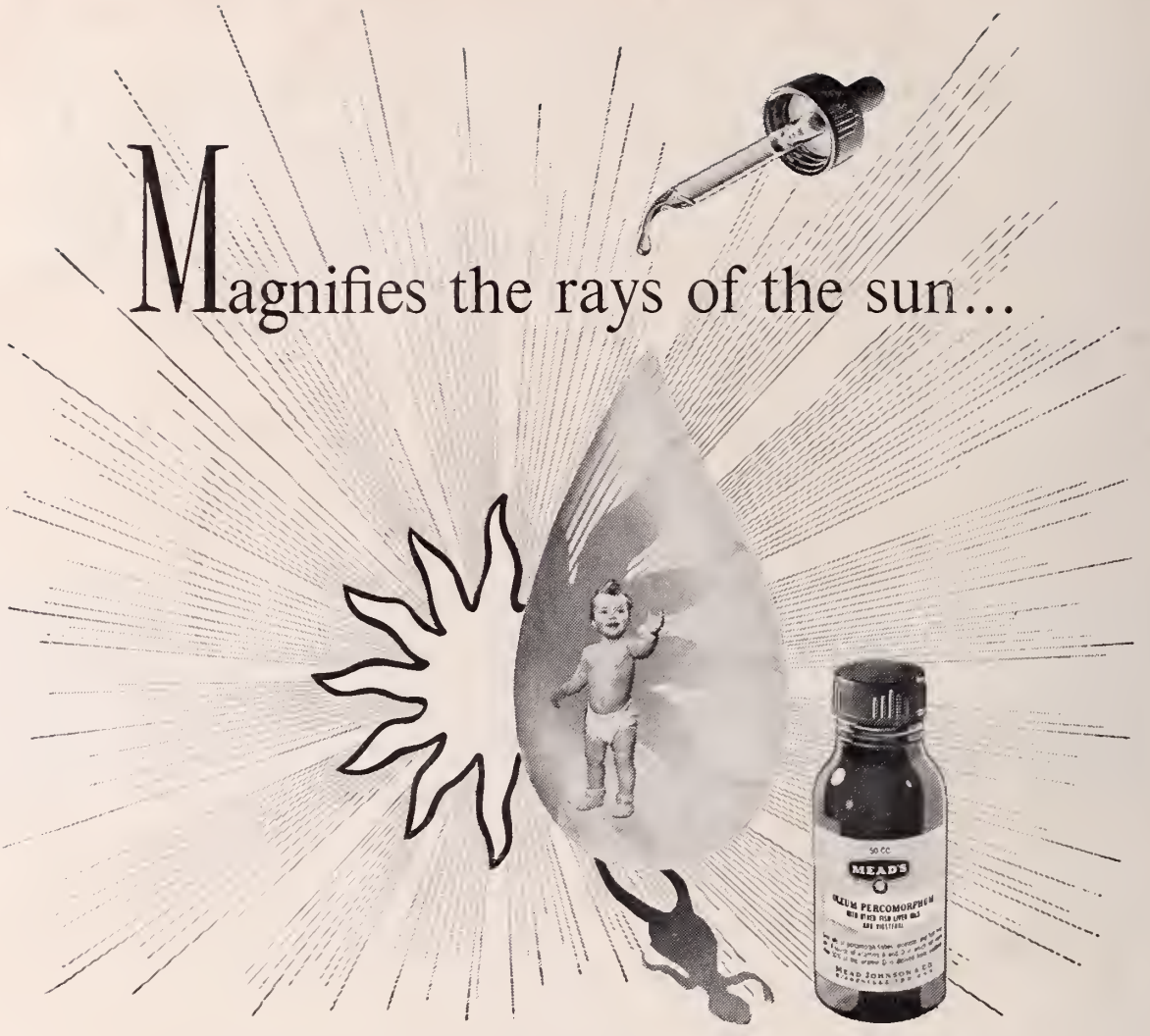
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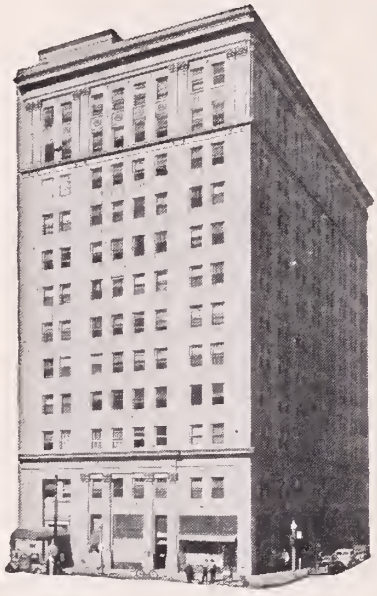
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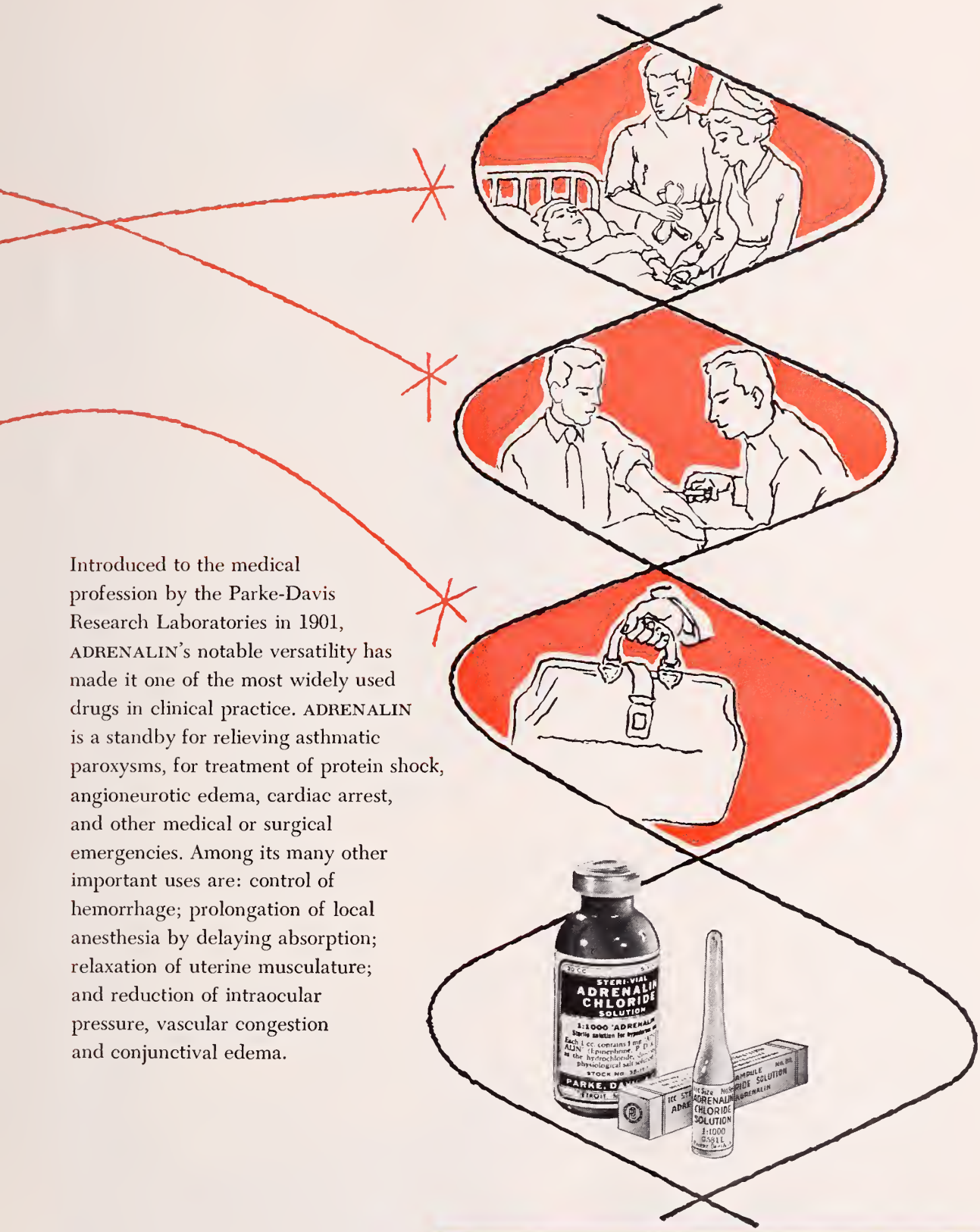
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